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1787 New Jersey What'sIt's?

Maris 38-Z altered into a no coulter, double mane variety

Image Courtesy Clem Schettino

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**Submitting Material for Publication**

We encourage our readers to consider submitting material on early North American numismatics to CNL for publication. In general, this includes coins, tokens, paper money, and medals that were current before the U. S. Federal Mint began operations in 1793. However, there are certain pieces produced after the 1793 date that have traditionally been considered part of pre-Federal numismatics and should be included. We cover all aspects of study regarding the manufacture and use of these items. Our very knowledgeable and friendly staff will assist potential authors to finalize submissions by providing advice concerning the text and help with illustrations. Submissions, in either electronic or hardcopy format, should be sent to the editor via the e-mail address given in the editorial or through the ANS at the above postal address.



Welcome to our summer issue. It is a diverse issue with, hopefully, something of interest for everyone. We start with a Technical Note from Clem Schettino where he reports on three new What'sIt?s, all created from genuine New Jersey coppers. A What'sIt? is a state copper where the original design was altered by a skilled engraver often resulting in a new variety. Clem reviews the previously recorded specimens and then presents the three new unreported New Jersey What'sIt?s. Images are provided of each specimen along with metrological data.

Frank Campbell, the longtime and highly respected ANS librarian, retired earlier this year. John Kleeberg, who worked with Frank, has written an appreciation of Frank and his career at the ANS Library. Integrated into the paper, John also provides suggestions on how a numismatic researcher can get the most out of the ANS Library. John's insights and recollections truly make interesting reading.

Next we are pleased to welcome a new author, Oliver D. Hoover, to the pages of *CNL*. Oliver is well known to many *CNL* readers through his published work in other ANS publications. For those who don't know Oliver, a biographical sketch follows.

Oliver Hoover is a trained ancient historian who has worked for the American Numismatic Society since 2001 as a curatorial assistant and as International Editor of Numismatic Literature. His academic historical and numismatic specialization is in the Hellenistic period (between the death of Alexander the Great in 323 BC and the death of Cleopatra VII in 31 BC). He has authored

and co-authored numerous articles and two books on the history and coinage of the Seleukid empire (a state established in the Near East by one of Alexander's generals). He was fortunate to be introduced to the exciting world of American colonial numismatics by Dan Freidus in 2001 while selecting the material for inclusion in the American cases of the Society's Drachmas, Doubloons, and Dollars exhibit at the New York Federal Reserve. Since that time colonial coins have continued to fascinate him. His interest in the American material, encouraged by people like Lou Jordan, Phil Mossman, Roger Siboni, and Ray Williams has led to several recent articles in the American Journal of Numismatics and the ANS Magazine. He has also edited the forthcoming proceedings of the 2006 Coinage of the Americas Conference on the St. Patrick series. He has also undertaken a long term book project on the money and finance of the French and Indian Wars (1689-1763).

Oliver's first contribution to *CNL* is an in-depth study of the Wood 33 copper. This halfpenny-sized copper is often associated with Canadian blacksmith coppers because it was included in the 1910 study of blacksmiths by Howland Wood. Over the years, however, many numismatists have come to realize that Wood 33 is more closely related to British evasion coppers than it is to Canadian blacksmiths. Oliver's groundbreaking study comes to the same conclusion – Wood 33 should be considered an evasion copper imported into Canada rather than a Canadian-made blacksmith.

Our final paper delves into the Potosí Mint scandal of the mid-1600s and its possible influence on the creation and operation of the Massachusetts Bay Mint. Authored by Dr. Philip Mossman in his never ending quest to improve upon his book *Money of the American Colonies and Confederation*, Phil studies the Potosí scandal and its effect upon the world's currency standard. In his book he had speculated that some of the questionable money consigned to the Massachusetts Bay Mint was from the Potosí scandal of 1648. However, based upon his current study of the scandal he has found that his original hypothesis needs to be revised.

Anyone with an interest in Spanish-American coinage will find Phil's latest work very interesting and informative.

Finally, I would like to remind you that a comprehensive *CNL* index is found online at [www.numismatics.org/cnl/](http://www.numismatics.org/cnl/) in PDF format. The index covers all issues that have been published over the past 48 years and is updated after each new issue. *CNL* contains a wealth of information on early American numismatics and no matter your interest it is likely you will find something of value.

Gary Trudgen  
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**NEW JERSEY WHAT'SIT?S**

from

**Clement V. Schettino; Saugus, MA****(TN-202)**

Recently three unreported New Jersey What'sIt?s were acquired by the author. This Technical Note (TN) provides images and metrological data on these specimens. But, what is a What'sIt? They are coins, in this case state coppers, where the original design was altered, sometimes substantially, to create "new varieties." The details and natural toning on the known examples are quite amazing!

The first What'sIt? reported in *The Colonial Newsletter* (CNL) was by Harold Hauser<sup>1</sup> where it appeared in TN-73. It is a 1787-dated Connecticut copper and it is plated on the front cover. The second and third examples followed in the June 1985 issue of CNL as TN numbers 73A and 102. Robert Martin<sup>2</sup> submitted a 1786 Connecticut copper and Richard Picker<sup>3</sup> presented the now famous 1788-dated New Jersey head left with D reverse. In October 1985 the only know Vermont What'sIt? was written up in CNL as TN-103, a piece which was submitted back in 1978 by Richard Picker.<sup>4</sup> The caption for this specimen reads "Vermont Ryder-13 with a clarity never before seen." A few pages later, in that same issue, are more details on the New Jersey head left with D reverse specimen provided by Scott Barnes<sup>5</sup> and an interesting comment by the editor on another specimen, a modified New Jersey copper, Maris 14-J. Next, Dennis Wierzba,<sup>6</sup> who had now acquired the New Jersey head left with D reverse, points out in TN-102B that Sylvester Crosby mentions these in his book [*The Early Coins of America*; 1875] and that Dr. Edward Maris [author of *Historical Sketch of the Coins of New Jersey*; 1881] had not acknowledged their existence. He also questions Richard Picker's statement that these specimens may be the work of Smith of Ann Street. Finally John Kleeberg<sup>7</sup> submitted to CNL, as TN-164, a discussion which had been previously published in the *American Journal of Numismatics* that occurred between Crosby and Maris concerning a New Jersey What'sIt?.

I have come to the conclusion, based on the physical evidence of these specimens, that even though the metal was chased or moved around on the surface of the coin the correct term for these creations might better be "sculptured" fantasies. Since the weight and diameter of the fantasies are clearly lighter and smaller than the original coins it appears that the metal was shaved and pushed to specific areas of the coin and then sculptured away leaving the "new" variety. This is much like one would do with a solid block of stone by removing pieces to leave a statue behind.

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1 Hauser, Harold W., "A Connecticut What'sIt?," *The Colonial Newsletter*, Serial No. 51, Volume 17, No. 1, April 1978, p. 622.

2 Martin, Robert, "Another Connecticut What'sIt?," *The Colonial Newsletter*, Serial No. 70, Volume 25, No. 1, June 1985, p. 910.

3 Picker, Richard, "A New Jersey What'sIt?," *The Colonial Newsletter*, Serial No. 70, Volume 25, No. 1, June 1985, p. 910.

4 Picker, Richard, "A Vermont What'sIt?," *The Colonial Newsletter*, Serial No. 71, Volume 25, No. 2, October 1985, p. 911.

5 Barnes, Scott D., "Additional Information on a New Jersey What'sIt?," *The Colonial Newsletter*, Serial No. 71, Volume 25, No. 2, October 1985, p. 918.

6 Wierzba, Dennis, "The Current Location of The New Jersey What'sIt?," *The Colonial Newsletter*, Serial No. 95, Volume 33, No. 3, October 1993, p. 1394.

7 Kleeberg, John M., "What'sIt? State Coppers," *The Colonial Newsletter*, Serial No. 99, Volume 35, No. 1, April 1995, pp. 1489-94.

The three previously unreported What'sIt? images are shown below at 1.5X actual size and are the courtesy of the author.

**Note:** Diameters are given as horizontal x vertical measurements.



**Original Coin:** Maris 14-J; Rarity-1

**Weight:** 138.3 grains

**Diameter:** 27.7 x 27.4 mm

**Die Orientation:** Coin turn

**Alterations:** Only the horse head was changed on the obverse. The obverse date and legend are untouched. The reverse is also untouched.

**Comments:** This specimen is 12.8 grains heavier than the author's unaltered example which has two small clips. However, it is 1.7mm smaller in diameter. A survey of ten random specimens of this variety yielded an average weight of 148.9 grains. Thus, this specimen is 10.6 grains lighter than the average weight of the unaltered survey examples.



**Original Coin:** Maris 38-Z; Rarity-4

**Weight:** 92.2 grains

**Diameter:** 25.1 x 25.9 mm

**Die Orientation:** Coin turn

**Alterations:** Both the obverse and reverse were changed. The coin was turned into a no coulter variety with a double mane!

**Comments:** This specimen is a whopping 59 grains lighter than the author's unaltered example, which has one small clip, and the diameter is 2.3 x 2.0 mm smaller. It is also the highest rarity altered variety that the author is aware of.



**Original Coin:** Maris 43-d; Rarity-1

**Weight:** 104.2 grains

**Diameter:** 24.1 x 24.1 mm

**Die Orientation:** Coin turn

**Alterations:** Both the obverse and reverse were changed. The coin was turned into a no coulter variety and a new major type was created when the swingletree was also removed!

**Comments:** This specimen is 47.1 grains lighter and 2.6 mm smaller in diameter than the author's unaltered example.

## Frank Campbell and the ANS Library: An Appreciation

by

John M. Kleeberg; New York, NY

Rick Witschonke has written, for the *ANS Magazine*, a profile of Frank Campbell, which outlines his life and career, and which will be summarized here. In 1958, when Frank Campbell was in his junior year at Cardinal Dubois High School, he obtained a part-time job working in the ANS library. He continued to work part-time while studying at Fordham University, from which he obtained a B.S. in Communication Arts in 1963. Upon graduation, he became a full-time employee of the ANS library. The Head Librarian then was Dick Breaden and the Assistant Librarian Geoffrey North. In 1966 Breaden retired, and North succeeded him as Head Librarian, with Frank becoming Assistant Librarian. In 1973 Frank obtained a Masters in Library Science from the Queens College School of Library and Information Sciences, where he was elected to the Beta Phi Mu Honor Society. When North retired in 1975, Frank became ANS Head Librarian, and held that position for thirty-three years. In 1984 he married his wife, Rosa, and in 1987 they had a son, Geoffrey Campbell (named after Geoffrey North), who is now attending SUNY Binghamton.

In the course of half a century in the ANS library, Frank met nearly every important numismatic researcher. I was naturally interested in his recollections of the large cent expert, medical doctor, and thief, Dr. William Herbert Sheldon, Jr. Frank described him in this way – Sheldon was outwardly friendly and “hail fellow well met,” but Sheldon had little black beady eyes – his eyes were totally cold, with no emotion in them. Now we know that Sheldon was a sociopath, so this observation was most perceptive.

The rest of this article will be an appreciation of Frank Campbell through his work – the ANS library, with suggestions how one can get the most out of it.

The history of libraries is the history of human knowledge. When printing from movable type was discovered in Europe in the mid-fifteenth century, the output of books soared. Duke Augustus the Younger of Brunswick-Wolfenbüttel bought every book published. This was still possible in the seventeenth century, but by the time of his death (1666) the cost was beginning to outstrip the resources of a small, but by no means insignificant, German state. One solution was to specialize. Even specialized libraries, however, run up against limits – Aby Warburg, who bought all art books, overtaxed the resources of the wealthiest private investment bank in Germany. A complete library even for numismatics is probably impossible too, but what makes Frank and the ANS library so impressive is how close they come. Frank juggled funds to keep up with acquisitions; and equally impressive, especially in the old ANS building, was how he juggled space.

A visitor to the old ANS library on 155<sup>th</sup> Street would get the impression that the library had grown up around its librarian, like a weed injudiciously introduced into an environment where it had no predator, a sort of kudzu. This impression was not wholly inaccurate. As the ANS library grew and grew in the old building, its holdings were crammed into all sorts of odd spaces. The projection room behind the old seminar room had a set of Michaud's *Biographie Universelle*. The old seminar room itself held the *Internationale Bibliographie der Zeitschriftenliteratur*, the *Bolshaia Sovetskaia Entsiklopedia* (with the article on L. P Beria intact) and *Ogam*, a journal on Celtic archaeology. The Reilly room held the Ersch-Gruber Lexicon, a Spanish encyclopedia, and the papers of Alexander Hamilton. The *Corpus Inscriptionum Latinarum* was right outside the upstairs toilet, so if one were suffering from indigestion one's knowledge of Roman epigraphy could become quite advanced.

This was both vexatious and charming, because one never knew what one could stumble across. The German language distinguishes between *Banknoten* (promises to pay issued by banks) and *Papiergeld* (fiat money issued by the state), and this distinction is preserved in the two Pick volumes, with general issues being *Papiergeld* and specialized issues being *Banknoten*. This is a distinction that no longer makes sense today, when virtually every country has a currency that is ostensibly *Banknoten* (a promise to pay by the Federal Reserve, the Bank of England, or the European Central Bank) but really is *Papiergeld*. One day I stumbled across the articles on *Banknoten* and *Papiergeld* in the Ersch-Gruber lexicon, written in the early nineteenth century when the debate was active and bitter, and the lexicon's explanation was pellucid.

What is the best way to get the most out of the ANS library? The best way is to go there and read absolutely everything. This strategy may not be possible, but even if one cannot do that, at least try to read more, and read more widely. A researcher who is interested in United States coins should not restrict research to the "United States" area of the bookshelves. A researcher interested in United States coins would better spend the time reading through the "Periodicals" area – the *American Journal of Numismatics*, the *Numismatist*, Frossard's *Numisma*, the two series of the *Coin Collector's Journal*. (There is an excellent overview of United States numismatic periodicals by the late Ken Lowe published in *Out on a Limb*.) But there is always something new to learn. I recently did some research in *Mehl's Numismatic Monthly*. I had assumed that it would be worthless, as the *Star Rare Coin Encyclopedia* is said to be. To my surprise it is better than the *Numismatist*, partly because the *Numismatist* reflects the party line of Farran Zerbe, and thus is censored when discussing the disputes surrounding the 1909 ANA election, whereas *Mehl's Numismatic Monthly* reports both sides.

One confusing area in the ANS library is the section entitled "General Works." One might think that this area contains multi-country surveys – e.g. the Krause *World Coins* catalogs, and that's true. The general catalogs – Craig, Friedberg, Krause-Mishler, Pick and Yeoman (the Brown Book) – are all here. General Works, however, includes not only general surveys, but any books that treat the coinage of more than one country. For example, John Davenport separated his thaler catalogs into European catalogs and German catalogs. Insofar as he issued German catalogs, those are shelved in the "German States" part of the ANS library. However, Davenport's books on European coins – which include coins issued by Austria – are shelved in the General Works area. Davenport's predecessors in the cataloging of thalers – his nineteenth century predecessor, Schulthess-Rechberg, and his eighteenth century predecessor, Madai – are also found here. So is Joachim's catalog of groschen-sized coins. The papers read and published at the International Numismatic Congresses held every seven years are found under General Works as well. So is Mendel Peterson's book about underwater archaeology, *History Under the Sea*. Another work found there is Eckfeldt and Dubois's *Mint Manual*. Still another is the catalogs of the collection of Jules Fonrobert, whose collection of Latin American coins (especially the Caribbean counterstamps) is a vital reference. General Works is a good place to look through every single book, because you never know what you will find.

Because of the lack of space in the old ANS library, periodicals were stored in a regular series – then in a separate series for unbound periodicals – and then in an exception to the exception. The *Numismatist* was in fat bound red volumes on the compact shelving upstairs; *The Colonial Newsletter* was unbound, in boxes in the periodicals room down a flight of stairs and through a door; and *Coins* magazine was stored in a third, locked, room, opposite the periodicals room and housing all sorts of remarkable objects, including a birdcage (but no birds). The birdcage may have been a remnant of when Frank raised homing pigeons; according to Witschonke, when North was running the library, Frank was able to keep his homing pigeons in the library. That's one way to deliver interlibrary loans!



This system, with its many exceptions and exceptions to the exceptions could only be fully navigated with the help of a skilled pilot – and this skill is what Frank provided. When the ANS moved to the building at Fulton and William Streets, the added space for the library enabled Frank and his assistant, Normand Pépin, to re-arrange the numismatic periodicals in one continuous series. This was tremendously helpful – a number of periodicals that had been misshelved turned up again. I was overjoyed the day I came across a complete set of the *Philippine Numismatic Monographs*, with the fine hoard reports about Spanish American coins found in the Philippines, written by Dr. P. I. de Jesus.

I ventured with Frank into the birdcage room a few times to obtain Breen's index. In 1951 Breen was employed by the ANS to prepare an index to the American auction catalogs in the library. This index was the seed of what grew to be Breen's *Encyclopedia*. Breen prepared the index on small index cards in tiny writing in pencil. In the 1970s Leslie Elam had a secretary transcribe and type Breen's index onto larger cards. These two iterations of the index lived in an old Kodak box that at one time held a slide carousel. When Eric Newman was revising his Fugio book last year, he called up Frank and said – "Please go and check if Breen said anything about Fugios that I ought to know about." I myself have used the index when working on the New Yorke in America token and on the Strawberry leaf cent. Another remarkable holding was a microfilm of Thomas Hall's inventory of his collection of colonial coins, photographed by the ANS when Burdette G. Johnson owned that inventory. Eric P. Newman, who now owns the inventory, transcribed references to the New Yorke in America token from it, and was a bit nonplussed when I told him that I had already seen it on microfilm. Eric was able, however, to teach me that Hall's price code was TRADEQUICK. Regrettably microfilm made in the late 1940s becomes unstable, so the emulsion was working free of the film when I used it in 1991. It was very hard to read.

Frank also had a locked room on the second floor of the old building that contained his "ammunition" – duplicate volumes that he judiciously sold from time to time into the book trade, thereby increasing the library's funds. For many years this locked room had a large supply of Clapp-Newcomb on the cents of 1795, 1796, 1797 and 1800 (which had been published by the ANS in 1947).

In the old building the auction catalogs, in many ways the centerpiece of the library, were particularly difficult to navigate. They were divided into two sections: American and Foreign; those sections were divided further, into bound and unbound; and the unbound were yet further divided into current and uncurrent. The bound and the uncurrent were put into compact closed stack shelving, the current were kept in filing cabinets. The bound catalogs were arranged by when they had arrived and then each was given a number – one number would be Mehl's ten Eyck sale, another the Jewett sale, and so on. By 1990 the filing cabinets ran out of room, and the more recent catalogs were put into cardboard containers and placed on top of the filing cabinets – a kick stool kept in the area enabled one to climb up and to see what was on top of the filing cabinets. It required much ingenuity (and not a little athleticism) to track down an auction catalog. The Schulman family, who produced both American and Foreign catalogs, current and uncurrent, through a bewildering group of entities – Jacques Schulman, Laurens Schulman, Hans M. F. Schulman, Schulman Coin and Mint, Kreisberg-Schulman – caused me many difficult hours. A casual remark – "Schulman had that piece, in one of his sales" – would result in days of frustration. Q. David Bowers has also been associated with many different entities – Tri-Cities, Empire, Bowers Coin Company, Paramount, Hathaway and Bowers, American Auction Association, Bowers and Ruddy, Bowers and Merena, American Numismatic Rarities, and now Stack's – but he has never produced both American and Foreign catalogs, under an almost identical name. (Perhaps that is his only remaining challenge in numismatics!) And there are other knotty problems – Hess-Leu, Bank Leu and Leu Numismatik, and Spink, which emerges again and again in a new form. If it was difficult for the user to navigate, imagine what it was like for the

cataloger – and it was Frank and his assistants who had to catalog this. Normand Pépin at one point explained to me the varieties of Glendinnings catalogs – with plates and prices, without plates but with prices, with plates but not prices, etc.... Moreover the pagination changes depending on which variety you have.

And then there were the fixed price lists. They could be American or foreign, very rarely bound, current or uncurrent, among the most ephemeral of the ephemera, yet they often concealed great treasures. But one of the most prestigious among the fixed price lists – the Adams sale of 1794 large cents – did not end up in the auction catalog/fixed price list maelstrom, but was kept in the section “United States – Cents.” Thus it was an exception to the exception to the exception to the exception. One can understand the comment that advanced collector of ancient coins and half cents, Bob Schonwalter, once made – “I think I’m losing my mind – the way this library is arranged is beginning to make sense to me.”

As is only to be expected with people working together at close quarters, there was occasional friction between the library and the curatorial departments. Frank did not like the way large sections of the library disappeared into the coin rooms – he soon learned that the first place to look for any book on the coinage of the Black Sea was near Elena Stolyarik’s desk. I was the prime suspect for anything involving the German states or large cents. The curators, in their turn, complained about the arrangement of the foreign language dictionaries by author, rather than by language. (Nearly all other libraries arrange dictionaries first by language groups, i.e. all Romance languages together, all Germanic languages together; the ANS library is the only exception I have ever encountered.) Frank put more and more of the library into closed stacks. In the mid-1990s, I often worked late at night in the ANS, and would venture into closed stacks. There were great things in the closed stacks, and I wouldn’t know what to ask Frank to get for me, if I didn’t first check what was there. I used to say that at night at the ANS the mice run around the building, and these mice have peculiar tastes – they like to read books and manuscripts kept in the library closed stacks. Often Frank would put books he was cataloging or setting aside for a long-term project into a section of the closed stacks. At one point Frank was out ill and a reader needed the Sotheby’s catalogs of the Brand collection. They were nowhere to be found in any of the usual places. Carlene Stober, Frank’s assistant, came to ask me if I had any idea where they might be. I replied, “Well, not being a librarian, I would NEVER go into the closed stacks without permission, but as it happened the other night I had a dream, and some mice were running around the ANS library, and they happened to wander into the closed stacks, and as they wandered into the closed stacks they found and read the Sotheby catalogs of the Brand collection – HERE,” and I laid my hand on the place in the closed stacks where those catalogs had been tucked away.

But this friction was atypical. After I left the ANS at the end of February 2000, Frank went out of his way to make me feel welcome whenever I came back to use the library. This was even though I often arrived late on Friday afternoons with oodles of requests. One periodical, *Ampurias*, became a running joke between the two of us, after I kept on paging the volumes down week after week. Felipe Mateu y Llopis wrote a survey of coin hoards found in Spain, and published this survey in the Spanish archaeological periodical *Ampurias*. I would transcribe sections from this, only to get home and discover that I was still missing some essential references. When I worked on the large cent litigation in the late 1990s, I regularly went to ask for the volumes by Clapp on the cents of 1798-99, by Newcomb on the cents of 1801-2-3, and by Clapp-Newcomb on the cents of 1795, 1796, 1797, and 1800. So frequent were my requests that I finally resorted to charades – I would clap my hands if I wanted the 1798-99 volume, produce a comb from my pocket if I wanted the 1801-2-3 volume, and clap and produce a comb if I wanted the 1795-97 and 1800 volume.

Carlene Stober and I were fascinated by the prolific Q. David Bowers, and she would call me from the library every time there was a new Bowers publication that we had not been aware of before. Not his books – those we generally knew about before they were published. What fascinated us were supplementary periodicals and fixed price lists – *Rare Coin Review* and its numerous progeny, to say nothing of his weekly column for *Coin World*. Tracking Bowers's publications kept us very busy. Carlene was also amused by the other numismatic periodicals, such as *Bo Tales*, for collectors of Hobo nickels. The most amazing find, however, was the German periodical on traditional (“odd and curious”) money, *Der Primitivgeldsammler*, which came with color photographs that had to be pasted in by hand into every issue. One issue was on emergency substitutes for money during the Russian Revolution, and included a color photograph of a box containing a hemorrhoid remedy ointment, for that, too, had been used as a money substitute.<sup>1</sup> Needless to say this caused an emergency call from Carlene to the curatorial area, so I could dash out and admire this.

There are some hotbeds of numismatic publication that turn out issue after issue. My colleague, the curator Alan Stahl, was on the mailing list of the *Schweinfurter Münzbelustigungen*, which arrived with astonishing regularity (at least once a month, sometimes once a week), and then would be transferred to the ANS library. In the late 1990s the card catalog was sent out in batches to a firm in Ohio to be scanned and turned into a searchable electronic catalog. Shipment after shipment of cards arrived in Ohio, until a woman from the firm called up Frank and exclaimed, in desperation, “How can people write so much about coins?!!” I often wonder about that myself.

Sometimes coin dealers publish a numismatic periodical that also contains a fixed price list – both Seaby and Spink have done this, in which case the periodical was put in the main periodical series. At other times the fixed price list swallows up the numismatic periodical. Thus Stack's *Numismatic Review*, in the first series, edited by Thomas O. Mabbott, is found in the main series of periodicals, bound in the traditional red that the ANS uses for many U.S. numismatic periodicals. The later series, edited by Jim Risk, is found among the unbound Fixed Price Lists. (A nice article in the second series is one by Jim Risk about “On Collecting Coins of the American Colonies,” including an account about a collector who was putting together a set of all the coins represented in the Castine Deposit.<sup>2</sup> That is not that easy, since there were some unusual coins in the Castine Deposit, like the Star of Lima pieces.) New Netherlands' *Numisma* lived for some time among the Fixed Price Lists, until Frank decided that it was rare and valuable enough that it should be in the rare book closed stacks. Other dealers have enough commentary attached to their auction sales that the auction catalog is, in effect, a numismatic periodical as well. Christensen, Bosco and Ponterio have all done this. There are articles by Ralph Gordon (concerning Caribbean fakes in the Fonrobert catalog, for example) that can only be found in the Christensen sales. In his article on the Fonrobert catalog, Gordon used one of the great numismatic phrases of all time: “This coin is ridiculous.”

Much of the work accomplished by Frank Campbell and his assistants is unseen. Frank ran an extensive exchange program, exchanging ANS publications for publications of foreign institutions. (Many numismatists know that library exchange programs were pioneered by Alexander Vattemare.) This built up the library at minimal cost – except for the extensive work it required from Frank. Among the more thankless tasks accomplished by Frank and his assistants is the cataloging of the numismatic newspapers, namely *Coin World* and *Numismatic News*. An article published in either of these papers is difficult to access, as opposed to, say, the *Numismatist*, which has several multiyear indices, plus an annual index volume. Because Frank and his

1 R. Gallinger, “Hämorrhoid Zapfchen als Geldersatz?,” *Der Primitivgeldsammler* 14, no. 1 (1993): 21-22.

2 James C. Risk, “On Collecting Coins of the American Colonies,” *Coin Galleries Fixed Price List* 18-19, April-June 1959; also in *Numismatic Review* 2, no. 3 (1961):109-115.

assistants cataloged the important articles in those papers and the ANS library catalog was scanned and is now available on the web ([www.numismatics.org](http://www.numismatics.org)), there is, in effect, an index to *Coin World* and *Numismatic News* on the web. The articles often discussed trivial topics, so cataloging must have been dull work. One week the most exciting news that one newspaper could put on its front page was the headline, "Many Varieties Exist of Canadian Large Cents."<sup>3</sup> The New York numismatist Michael Druck, then employed by Stack's, was quite taken by this news. He would grab my arm and say to me, "John, have you heard?!!! The news is really shocking! Many varieties exist of Canadian large cents!"

A big problem, however, is getting access to old issues of those newspapers. They exist on microfilm, but most of us do not have microfilm readers. My personal wish is that the back issues could be issued on CD-ROM. The news that many Canadian cent varieties exist should not be hidden away.

A great resource of the ANS library is its pamphlet file. Sometimes one is searching for an article, and naturally, one searches under the name of the periodical under which it was published, and one finds that neither the ANS, nor the New York Public Library, nor Columbia, has that periodical. But wait – all is not lost as yet. Numismatics is a comparatively small field, and many scholars working in the field forwarded off-prints of their articles to the ANS library. Just because you cannot find a copy of the volume of the *Beiträge zur Geschichte von Stadt und Stift Essen* that has the article by Professor Bauernfeind about the coinage of the Abbesses of Essen does not mean that all is lost. Professor Bauernfeind may have forwarded an off-print of his article, suitably autographed, to the ANS library, and it is waiting for you there in the pamphlet file, with the valuable Bauernfeind autograph commending it to the ANS library.

Several months ago, when I was doing research about shipwrecks, I was reading up about the *Akerendam*, a Dutch East India ship that sank off the coast of Norway. The coins recovered from this ship have been published, by Bjørn R. Rønning, in the *Nordisk Numismatisk Årsskrift*, but in Norwegian. While looking through the catalog I discovered that Professor Rønning had also translated his article into English and mailed a copy of the typescript to the ANS – and the typescript was waiting there in the ANS pamphlet file.<sup>4</sup>

The pamphlet file holds details of people's research – correspondence with the Treasury Department as to exactly which make of car is depicted on the back of the ten dollar bill (answer – in order not to be seen favoring any particular manufacturer, it is no marque in particular, but the correspondent who asked the Treasury Department concluded that the car did combine individual elements from many different cars). A personal favorite was the two pamphlets issued with lists of the serial numbers of the notes used for the ransom in the Lindbergh kidnapping.<sup>5</sup> And there are the records of human folly – prospectuses for limited partnerships created in the 1980s to invest in rare coins, which blew up a few years later.<sup>6</sup>

Even if you have read a book a million times, it is always useful to look at the ANS library copy. Why? Because people write in books. In a book published by José Torribio Medina about coins

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3 S. Schor, "Many varieties exist of Canadian large cents," *Canadian Coin News*, October 1, 1991.

4 Bjørn R. Rønning, "The finding of coins among wreckage after the Dutch East Indiaman *Akerendam*, wrecked near Runde in 1725." Typescript of translation in the ANS pamphlet file.

5 United States, Treasury Department, *List of serial numbers of certain United States notes of the \$5.00 denomination, U.S. Gold certificates of the \$10.00 denomination, and U.S. Gold Certificates and Federal Reserve Notes of the \$20.00 denomination – representing the ransom paid in the Lindbergh Case* (Washington, April 6, 1932).

6 Merrill Lynch, *The Athena Fund II, LLP: An historic investment opportunity* (Philadelphia, [1988]).

of the Americas I found a comment next to the description of the 10 reales of Santo Domingo – “Have seen in copper – RIN.”<sup>7</sup> RIN are the initials of Robert I. Nesmith. In the copy of *Abe Kosoff Remembers*, Kosoff commented that when he was trying to figure out whether the \$20 gold piece with the Paquet reverse was a pattern or not, Wayne Raymond told him of a researcher that Raymond hired to look up things in the National Archives, and although Raymond did not tell Kosoff the name of the researcher, Kosoff could probably guess who it was. Next to this remark by Kosoff is a comment in purple ink, “Yes, thanks Abe, WB.”<sup>8</sup> WB are the initials of Walter Breen. Thomas Hall wrote useful comments in his copy of Crosby on the cents of 1793.

This is another strength of the ANS library – when notable numismatists die, they bequeath their libraries to the ANS. Two advanced collectors of ancient coins, Herman Miller and Charles Hersch, bequeathed their libraries to the ANS, and both of them never saw a book on archaeology they didn’t like. Some of this stuff came out in the recent ANS duplicate book sales. I acquired a group of Red Books, and discovered that virtually every copy previously had been associated with an eminent numismatist. My Red Book set thus contains copies that previously were handled by Dr. George Carpenter Miles, David Bullowa, and William T. Anton, Sr. I also obtained a Davenport catalog that previously had belonged to P. K. Anderson.

Curiously, though, one of the few exceptions to this rule is Edward Theodore Newell, who did not bequeath his library to the ANS, but to a university. The ANS library does, however, have manuscripts by Newell. Shortly after Dr. Elena S. Stolyarik joined the ANS staff, she was working on cataloging a collection of ancient coins and came across some Seleucid coins. I urged her to consult one of Newell’s works in attributing the coins. “Who is Newell?” she asked. Since Elena had arrived not too long ago from the former Soviet Union, I felt an analogy that would be close to home would be the best way to explain the importance of Newell, so I said, “He’s our Karl Marx.” She found Newell’s work very helpful, until one day she came across a coin that appeared to be uncataloged in Newell’s *Seleucid Mint of Antioch*. “That’s impossible,” I said. “Newell is our Karl Marx, and our Karl Marx is never wrong.” So I went into the ANS library, and found a set of photocopies of an edition of the *Seleucid Mint of Antioch* that had annotations written in the margins by Newell.<sup>9</sup> And lo and behold, among the annotations, was the coin that Elena could not find in the printed book. Newell had discovered it after the publication of the book, and was making annotations for a second edition. Of course he had known about the coin – for Newell (being our Karl Marx) is never wrong.

It was the collection of manuscripts that brought Frank in contact with his most generous donor – Harry W. Bass. Harry Bass was putting together a collection of United States gold by die variety, and his attention got directed to the notebooks in the ANS library maintained by Edgar Holmes Adams. Adams, too, had been interested in die varieties of regular U.S. gold, and had put together scrapbooks with rubbings and photographs of U.S. gold coins – Edgar Adams even cut up Chapman catalogs to make up his scrapbooks. This seems shocking to us today, but at that time plated Chapman catalogs must have been so common that it was economical to do. Harry was disturbed by the poor condition of the notebooks, and Frank was able to persuade Harry to donate the money to rebind the notebooks to preserve them for posterity. That began a series of donations to the library by Harry Bass, including a donation leading to one room in the library being named after Harry Bass (the Bass room, which, curiously enough, was quite close to the upstairs bathroom) and a Bass library fund. In the William Street building, the library was named after Harry Bass, with a large plaque depicting Harry Bass at the front entrance.

7 José Torribio Medina, *Las monedas coloniales hispano-americanas* (Santiago de Chile, 1919), pp. 139, 141.

8 Abe Kosoff, *Abe Kosoff Remembers... 50 years of numismatic reflections* (New York, 1981).

9 Edward T. Newell, *The Seleucid Mint of Antioch* (New York, 1918). Photographic copy of E. T. Newell’s personal copy containing his notes and additions.

During the 1990s Frank acquired a series of important manuscripts. The first acquisition was a group of papers collected by John W. Adams concerning large cents.<sup>10</sup> One item was a notebook kept by Homer K. Downing, recording his weekly conversations with Henry Clay Hines in Newark concerning large cents. From this notebook I learned that Hines was dubious about the authenticity of the Rubin strawberry leaf cent when it came onto the market. Next Frank bought the archives of the New Netherlands coin company, including the auction bid books. There is an entire history of auction house intrigue waiting to be written from those bid books – after reading those bid books it seems as though auction history, which previously had only two dimensions, has five instead. Patty Wormser, Charles Wormser's widow, donated additional New Netherlands correspondence to the library, which fills out the larger acquisition. Then came the ledgers of the Norweb Collection, kept by Emery Norweb, which had pasted in rubbings of Connecticut coppers, made by Thomas Hall.<sup>11</sup> Then came the acquisition of the Brand ledgers, called the "Brand Numismatic Archives," again partly by purchase and partly by donation. The Brand collection is one of the black holes of provenances, and thanks to the ledgers one can track the coins going in and the coins going out of the Brand collection. Then, through the good offices of Susan and David Tripp, came the Garrett Numismatic Archives. And there are other fine acquisitions that will become accessible in later years – Ray Williamson's correspondence, the Ford papers, and on and on. Just by idly going through the shelves of the ANS one would find remarkable things – bid books of the Chapmans, a scrapbook of correspondence by George Cogan. One day, while browsing the shelves, I happened to notice that Frank had recently bought a batch of photocopies of work by Walter Breen. I had been told that Breen had prepared an extensive inventory of the Stepney Hoard, but that it had been destroyed in a flood in Breen's Staten Island home. I said to myself, "Well, we know the inventory to the Stepney Hoard isn't going to be here, since we know that that was destroyed in the flood, but I'm so pigheaded that I'll look anyway" – and there it was. This photocopy then became the basis for Phil Mossman's article about the Stepney Hoard (CNL-108).

Then there are odd little manuscript pieces in the ANS library that one may not know about, but should keep in mind. Charles Edwin Clapp, Senior, the elder brother of George Hubbard Clapp, put together a fine collection of colonial coins, including the Massachusetts silver collection that went from him to Carl Würtzbach to T. James Clarke to Frederick C. C. Boyd to John Ford. Charles Edwin Clapp's son was an alcoholic and a stockbroker. Being an alcoholic didn't cause that many problems, but being a stockbroker sure did, because Clapp Junior lost \$600,000 in six months during the Wall Street Crash.<sup>12</sup> If Clapp Junior had just stayed at home and drunk a bottle of Scotch each morning, instead of going to the office, pretending to work, and taking positions on the stock market, he would have done everyone a great favor. Clapp Senior had to sell his colonial collection to bail out his son, and his brother George H. Clapp circulated the list to potential buyers (which included the ANS).<sup>13</sup> I believe there is another copy of this inventory in the Garrett Numismatic Archives, which are also in the ANS library. Besides the Massachusetts silver, Charles Clapp's great collecting achievement was in Somer's Islands coinage, which he gave to the Carnegie Museum in Pittsburgh, and which were later sold through Spink.

At the farewell lunch for Frank Campbell, John W. Adams said that we might miss Frank now that he was leaving, but we would really miss him in five years, or even ten years time, when we remembered what we had lost and how much he had done for the library. The same sentiments were expressed to me in almost the same words a few weeks later by an advanced scholar of Roman imperial coins. Such was Frank's influence, on the most diverse areas of numismatics.

10 Papers Relating to United States Large Cents: From the Collection of John W. Adams, 1855-1972.

11 Norweb coin collection: ledgers, 1936-1957. Holograph records of the R. Henry and Emery May Norweb coin collection, nos. 1-16999.

12 Charles Edwin Clapp, *The Big Bender* (New York, [1938]).

13 Charles Edwin Clapp, *American Colonial Coins*. Manuscript.

## Wood 33: An Evasive Copper in North America

by

Oliver D. Hoover; Burlington, ON

### Introduction

In 1910 Howland Wood included the copper now known as Wood 33 in an article devoted to Canadian blacksmith coppers and ever since that time numismatists have associated the Wood 33 with the blacksmith series. However, Wood's article actually discusses that variety under the rubric of "The Miscellaneous and Doubtful Series" and the brief commentary notes that Wood 33 "is undoubtedly a counterfeit, not of a regal coin, but of one of the English counterfeits with similar inscription. The head, however, faces the other way, a peculiarity common with the Blacksmiths."<sup>1</sup> Wood's language here suggests that he was much less than 100% certain that Wood 33 was properly located among the other coins of the Blacksmith series. His apparent doubts may have been influenced by the fact that Wood 33 was not listed in P.N. Breton's *Illustrated History of Coins and Tokens Relating to Canada* (Montréal, 1894), despite the frequent appearance of specimens in the numismatic markets of Ontario, Québec, and the Canadian Maritime Provinces. Breton in turn, may have omitted the series because J. Atkins was already aware of examples from English sources and classified them as evasion coppers in *Tokens of the Eighteenth Century* (London, 1892), no. 304. On the other hand, it is clear that R.W. McLachlan considered Wood 33 to be Canadian when he published the Bank of Montréal hoard in 1889.<sup>2</sup>

Examples of Wood 33 have appeared in the hands of local coin dealers from Maine, Maryland, New Jersey, and New York, possibly implying local find provenances. Nevertheless, the early claim that Wood 33 was a token coinage produced by Vermont Tories seems to be based not on find evidence, but rather on the misreading of the last part of the obverse legend as VTS and the assumption that it was an abbreviation of *Vermontis*, a neo-Latin form of the state's name found on some Vermont coppers of 1785.<sup>3</sup>

Despite what Atkins and Breton appear to have known at the end of the nineteenth century, and Wood's own doubts at the beginning of the twentieth century, the variety continues to appear under the general heading of "Blacksmith Tokens" in the *Charlton Standard Catalogue of Canadian Colonial Tokens*. Ironically, several recent students of American colonial counterfeit circulation have doubted the association of Wood 33 with the other Blacksmith coppers and have identified them instead as coins related to the evasive series, apparently without realizing that this view is now more than a century old. In 1987, Oppenheim pointed out that "the lettering appears to be from punches and the fabric and planchet size are more regular than for most blacksmiths. Perhaps the die was prepared in England by recutting some earlier evasion halfpenny and then shipped to North America."<sup>4</sup> While this is not entirely impossible, this explanation seems overly complex and does not account for the use of good copper planchets, which would have had to be shipped overseas along with the dies. Anton and Kesse are much more convincing in their

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1 H. Wood, "The Canadian Blacksmith Coppers," *The Numismatist* 23.4 (April 1910): 104.

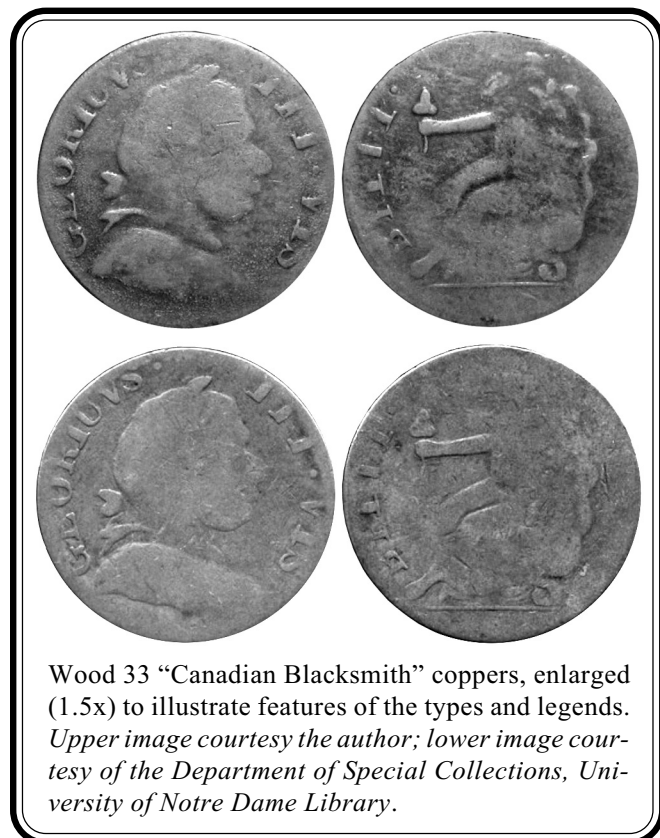
2 R.W. McLachlan, "A Hoard of Canadian Coppers," *Canadian Antiquarian and Numismatic Journal* 1.1 (July 1889): 31.

3 J. Hickock, *History of the American Coinage*; McLachlan 1889, 31, already raised doubts about this theory. For the *Vermontis* legend see Breen 712 and O. Hoover, "The Language of Liberty, Part 2," *ANS Magazine*, (Spring 2007): 48.

4 Bowers and Merena March 26-27, 1987, *The Frederick B. Taylor Collection and Other Properties* pp. 111.

simple claim that Wood 33 coppers are properly speaking imported English evasive coppers “as their legends and the profiles of George II [referring to Wood 34] & III most strongly resemble the Evasion series.”<sup>5</sup> In the following pages it will be shown that Wood 33 is very closely related to the regular English evasive coppers, if not actually a member of the series.

### The Types



Wood 33 “Canadian Blacksmith” coppers, enlarged (1.5x) to illustrate features of the types and legends. *Upper image courtesy the author; lower image courtesy of the Department of Special Collections, University of Notre Dame Library.*

The obverse type of Wood 33 is a crude and unfinished right-facing portrait of King George III based on the laureate and cuirassed bust portraits used for his regal halfpence from 1770 to 1775.<sup>6</sup> This design type was widely imitated by English and American counterfeiters as well as by English evasive copper manufacturers to the end of the century. The tip of the laurel wreath is visible at the top of the head and its bow and tie-ends are prominent at the back of the neck. The rough outline of four shoulder pteruges (rectangular leather sections) of the cuirass are also visible. Beyond these elements the portrait of the king on Wood 33 is a silhouette with sloping forehead, strong eyebrow ridge, large pug nose, and fleshy chin.

The reverse type depicting Britannia seated left is also based on the regal copper reverses of 1770-1775, but is even more crudely rendered and even more weakly cut into the die than the obverse. The only details

that can be distinguished easily are Britannia’s extended right arm holding what is usually described as a shamrock,<sup>7</sup> her legs, and the bottom scrollwork with part of the oval face of her shield. On very well preserved specimens some faint traces of the shield’s Union Jack device can also be distinguished. A peculiar shape, somewhat reminiscent of a rock outcropping, defines Britannia’s back, but it is unclear as to what it was intended to represent. No similar shape appears on any regal coppers of George III.

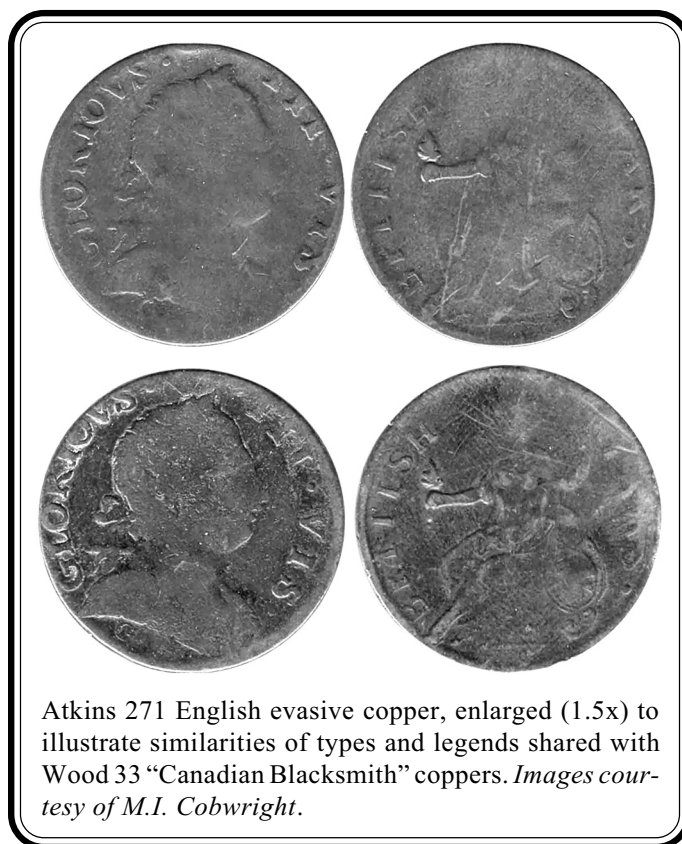
While the ultimate source for both types was the English regal coinage, the immediate model for Wood 33 was almost certainly the evasive copper Atkins 271. This series also features a silhouette of George III facing right (but not nearly as crude as that of Wood 33) and a Britannia reverse so weakly cut into the die that her head, arm holding spear, and body are virtually invisible on most specimens. Like Wood 33, only her outstretched arm holding a leaf very similar to the

5 W. Anton and B. Kesse, *Forgotten Coins of the North American Colonies* (Iola, WI, 1992), p. 15.

6 Spink, *Coins of England and the United Kingdom*, 40th ed. (London, 2005), no. 3774.

7 Wood 1910, 104.





Atkins 271 English evasive copper, enlarged (1.5x) to illustrate similarities of types and legends shared with Wood 33 "Canadian Blacksmith" coppers. *Images courtesy of M.I. Cobwright.*

supposed shamrock, legs and shield are normally clear. The simple treatment of the arm and hand on Atkins 271 is very similar to Wood 33 and both series give a characteristically long stem to Britannia's leaf or shamrock (really corrupt versions of the tripartite olive branch of the regal type). The treatment of the legs is also similar on both types, as is the overemphasis of the shield's lower scrollwork, although the style of Wood 33 is generally cruder and indistinct. In short, Wood 33 appears to ineptly copy the types of Atkins 271, indicating a closer connection to the English evasive series—which is otherwise virtually absent from North America<sup>8</sup>—than to the extremely crude Canadian blacksmith coppers. The use of well-produced copper planchets for Wood 33 also tends to point to an English origin, but the most solid argument for placing these coppers within the evasive series

lies in the analysis of the legends and the punches used to make them.

### The Legends

One of the controversial features of Wood 33 is the use of peculiar and poorly punched legends that appear to have had the tops of their letters purposely obscured by die polishing. In his seminal article on Canadian blacksmith coppers, Howland Wood read the obverse inscription as GLORIOVS III·VIS and the reverse legend as BITIT(?).<sup>9</sup> However, on closer examination of several high-grade specimens in hand and in photographs makes it necessary to revise Wood's reading.

The obverse forms of the G, the first O, the R, I, V, and S of GLORIOVS are virtually indisputable. However, under raking light the very weak serif end of a second cross-bar appears on the L of well-preserved examples, indicating that the original letter was probably an E, rather than an L. Close inspection of Wood's second O shows that the right side is thin while the left is thick, in contrast to the initial O, which is thick on both sides. Unless we assume that a second and oddly formed O punch was used, which seems highly unlikely, the second O must really be a U.<sup>10</sup> Thus, Wood's GLORIOVS is more correctly rendered as the pseudo-Hanoverian dynastic name

<sup>8</sup> E.P. Newman, "Circulation of English and Bungtown Halfpence," in E.P. Newman and R.G. Doty, eds., *Studies on Money in Early America* (New York, 1976), pp. 151-153; P.L. Mossman, *Money of the American Colonies and Confederation* (New York, 1993), p. 123.

<sup>9</sup> Wood, "The Canadian Blacksmith Coppers," *The Numismatist* 23.4 (April 1910): 104.

<sup>10</sup> GLORUVIS was originally read by R.W. McLachlan, "A Hoard of Canadian Coppers," *Canadian Antiquarian and Numismatic Journal* 1.1 (July 1889): 27-34.

GEORIUVS. The reading of the inscription elements, III·VIS, that follow are uncontroversial and normally understood as the ordinal numeral (III) borrowed from the regal coinage of George III and a corruption (VIS) of the royal title REX. However, the ordinal numeral is curious because it does not use the same I punch as was used in GEORIUVS. Instead, it involves a different punch with a single serif on the bottom left side.

Looking at the initial I on the reverse of Wood's BITIT(?)· on high-grade examples and under good lighting, the weakly punched bottom loop and tail of R appears. The weakness of the punch impression may account for the poor placement of the letter T that Wood reads as immediately following. The end of R's tail seems to curve immediately above the bottom left serif of the apparent T. It is worth noting that the R and I of GEORIUVS are also somewhat close together. The Ts and second I of the reverse legend are probably misread as well. Under raking light the weakly punched and obscured serif ends of a top crossbar can be made out in the spaces between the second I and the flanking Ts of Wood's reading. This feature suggests that I should really be taken as a T. Since the serified bases of the flanking letters are different from those of this T, but similar to those of the letter I in GEORIUVS, it seems reasonable to understand the reverse legend as BRITI·, an abbreviation of the word BRITISH.

Some of the oddities of the inscriptions closely replicate features of the legends found on Atkins 271, further strengthening the view that Wood 33 must be a type of evasive copper that somehow made its way to North America in large quantities. For example, the obverse legend of the former is clearly GLORIOVS·III·VIS, which is often struck so close to the edge of the planchet that the tops of the letters are often off flan. On other examples the edges have been worn in such a way that the letter tops are obscured. Thus, GLORIOVS begins to look much like GLORIUVS, which is very close to the form GEORIUVS of Wood 33. It is tempting to think that the diesinker of Wood 33 consciously attempted to replicate the imperfectly preserved legend of Atkins 271. This suspicion is further strengthened by the comparison of the ordinal numeral III in both series. Atkins 271 employs an I punch with a noticeable serif on the bottom left and an extremely weak (almost invisible on some specimens) serif on the bottom right. This same distinct form occurs on Wood 33, as we have already mentioned. It is hard to explain this similarity of forms unless Wood 33 imitates Atkins 271. The reverse legend also gives the impression of imitation, although that of Atkins 271 is BRITISH TARS and that of Wood 33 is merely BRITI·. As in the case of the latter, the R of BRITISH on Atkins 271 has an extremely weak tail, looking like a P on most specimens. The Is of BRITISH also have noticeable serifs, whereas the serifs at the bottom of the T are extremely weak—features that are replicated on Wood 33 by serified Is and a T lacking any serif.

The evidence of the legends combined with the types makes it very difficult to escape the conclusion that Wood 33 is an imitation of Atkins 271 and that the BRITI· of the former is merely a cut down version of the full BRITISH TARS legend. Thus Wood 33 is in fact an evasive of an evasive! One could perhaps argue that because of its imitative character Wood 33 should be classified as a Canadian blacksmith copper taking an evasive piece as its model, but this is difficult to accept for a number of reasons. For one thing, there is little evidence that English evasive coppers circulated in quantity in Canada, thereby making them an attractive target for private forgers.<sup>11</sup> The quality of the planchets and the use of letter punches also point to an English origin. The true blacksmith series almost never involves legends.

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<sup>11</sup> The only examples known to the author are specimens of Atkins 204, 275, 284, and 323 found in the St. John River Valley, Nova Scotia and (P.L. Mossman, "Money of the 14th Colony: Nova Scotia (1711-1783)," *CNL* 124 [December 2003]: 2582) and Atkins 493 (R. Michael, "An Imitation Eighteenth Century Copper Halfpenny," *Canadian Numismatic Journal* 27.6 [June 1982]: 254-257).

A review of the BRITISH TARS evasive series with George III/Britannia types reveals a pattern of obverse legend corruption that probably ends with Atkins 271 and Wood 33. Initially, the die cutters used the obverse legend GLORIOVS IER·VIS·, referring to the hailing of Admiral Sir John Jervis (IERVIS) as a British hero after February 14, 1797. On this day, he led the British Mediterranean Fleet to victory over a numerically superior force of Spanish vessels off the coast of Cape St. Vincent, Portugal. This is the triumph that made Jervis glorious in the eyes of Great Britain and which resulted in his creation as Baron of Meaford in Staffordshire County and Earl of St. Vincent.

At some point the legend becomes GLORIOVS IFRVIS, apparently using an F for E, although the F may be an E with the bottom bar filled in. The serif only appears on the left, as in the case of the ordinal numeral III (reduced from IER/IFR) on Atkins 271 and Wood 33. We suspect that this later becomes the GLORIOVS·III·VIS of the former, and later still the GEORIUVS·III·VIS of the latter. Some intermediate corrupt forms like GLORIOVS IERVES (Atkins 275; G.0800) and GLORIOVS IEI VES (Atkins 266; G.769.5) are also known from evasive series other than the BRITISH TARS group.

### Wood 33 and Evasive Coppers

Like all evasive and blacksmith coppers, Wood 33 is difficult to date with any precision. However, it is possible to wring some chronological evidence out of it based on its connection to other evasive varieties. The ultimate derivation of GEORIUVS III·VIS from the various GLORIOVS IERVIS series guarantees that it cannot have been produced before February 14, 1797.

A *terminus ante quem* of 1797 is also supported by the reverse legend BRITI· if it has been correctly interpreted as a severely cut down version of BRITISH TARS, a reverse inscription commonly paired with GLORIOVS IERVIS obverses. Many of the other obverse legends paired with BRITISH TARS reverses also frequently refer to political and military figures and events in 1797, thereby giving the series a commemorative flavor. This may imply initial production in 1797, although there is no telling how long various evasive varieties were produced. M.I. Cobwright lists the following obverse legends paired with BRITISH TARS reverses in *A Journey through the Monkalokian Rain Forests in Search of the Spiny Fubbaduck* (Bramcote, 1993):

1. GEORIVS PIT·SEX (1767) G.0717
2. GREGORY·III·PON (1767) G.1193
3. GLORIOVS NE·SON (1767) G. 0838
4. GEORGE·RULES· (1771, 1797) G.0280
5. GREGORY·III·PON · (1771, 1797) G.1180
6. GLORIOVS IFRVIS (1771) G.0830
7. GLORIOVS·III·VIS· (1771, 1797) G.0835
8. GLORIOVS PE·LEW (1771, 1797) G.0850
9. CORNWAL LIS IND (1797) C.220
10. CORNWAL LIS·IND (1797) C.0250
11. GEORGE GORDON (1797) G.0060
12. GLORIOVS IER·VIS· (1797) G.0810
13. GLORIOVS·IER·VIS· (1797) G.0820
14. GLORIOVS PE·LEW (1797) G.0860
15. LONG LIVE THE KING (1797) L.030
16. GLORIOUS PEL·LEW (1797) G.0768

While inscriptions like GEORGE RULES and LONG LIVE THE KING are so generic that they could refer to just about any period during the reign of King George III, almost all of the other

obverse legends can be connected to the year 1797, the date most frequently found in the exergue. The 1767 date is probably 1797 with the 9 inverted.

Thus the legend naming GLORIOVS NELSON refers to Horatio Nelson, who serving as Commodore aboard the frigate *Minerve*, supported Jervis in the Battle of Cape St. Vincent, which took place in 1797 as noted above.

The legend GLORIOVS PEL[L]EW is almost certainly referring to Captain Edward Pellew, who, despite finding himself heavily outgunned aboard the frigate *Indefatigable*, managed to drive the enemy French ship-of-the-line, *Les Droits de l'Homme*, aground on September 14, 1797.

The CORNWALLIS IND legend must refer to Charles Cornwallis. Although he is most well known to the American audience for his command of British forces during the American Revolution, the evasive inscription refers to his later position as Governor-General of India, which he initially held from 1789 to 1793. During this time he earned honors for his defeat of the powerful ruler of Mysore, Tipu Sultan (1792), which paved the way for further British expansion into the Indian subcontinent. In 1797, he was offered a second term as Governor-General of India, but he was forced to decline for health reasons. The position was offered to him again in 1805, at which time he accepted it, but he died within the year.

A tenuous case can be made for associating the GREGORY III PON legend with the year 1797. The inscription refers to Pope Gregory III, whose pontificate ran from 731 to 741. He was an obvious subject for an evasive coinage since his name and ordinal numeral look very similar to the GEORGIVS III of regal coppers, however, he may have been topical in 1797, for this year saw the Prince of Wales propose a Catholic Emancipation Bill for Ireland. After his coronation as King George IV, the Prince completely reversed his position and opposed all attempts to settle the Catholic Question until 1829.

Even the obscure yet titillating legend GEORIVS PIT SEX might have had some special relevance in 1797. While this is clearly a corruption of the GEORGE SUSSEX inscription found on another relatively large series of evasive coppers (Atkins 201-209), the replacement of the SUS of SUSSEX with PIT, may have been intended to allude to William Pitt the Younger. Pitt—a favorite of Americans for his opposition to the British military response to the American Revolution—served as Prime Minister of Great Britain from 1793 to 1801 and his government was forced to carry the crippling expenses of continuing the war against Revolutionary France. On October 17, 1797, the First Coalition of European powers against France, including Great Britain, collapsed leaving the British to continue the struggle alone until the Second Coalition could be formed in 1799. The expenses of the war were staggering and the Pitt government instituted a number of financial novelties in 1797 in order to preserve the state's finances. These included the introduction of an income tax and paper banknotes that could not be converted into gold.

The only legend that cannot be plausibly linked to events of 1797 is that naming GEORGE GORDON. Lord George Gordon organized Protestant associations in 1779 in order to force the repeal of the Catholic Relief Act passed in the previous year. On June 2, 1780, he led a march to present a petition against Catholic Emancipation to Parliament, but the political protest quickly devolved into an orgy of violence known to history as the Gordon Riots. The rioters sacked Catholic homes and churches, broke open prisons, and attacked the Bank of England before they were quelled by the British army. Gordon was charged with high treason for instigating the riots, but was ultimately acquitted. The decision to name Gordon on the halfpence may also have arisen from the fact that he moved to Birmingham (the center of evasive halfpence production) in 1786 and became a controversial local figure by converting to Orthodox Judaism. In 1788 he

was convicted of defaming Marie Antoinette and sent to Newgate Prison, where he died on November 1, 1793. During his imprisonment Gordon gained a reputation for great charity and care for his fellow inmates. This reputation survived his death and is reflected in his characterization by Charles Dickens in *Barnaby Rudge* (1840-1841).

On the basis of the obverse legends it is possible to date the initial production of the BRITISH TARS reverses to 1797 as their dates generally claim. It is unclear if or for how many years BRITISH TARS halfpence continued to be struck, but they probably ceased before 1813. If they had continued this late we should expect there to be at least one legend honoring Field Marshal Arthur Wellesley for his victories during the Peninsular Campaign against Napoleon in Spain (1808-1814) that earned him the title of Duke of Wellington, but there are none. Instead, these victories, and the final defeat of Napoleon in 1815, are celebrated by the new series of Wellington tokens, which seem to have plagued England in much the same way that the evasive coppers had previously.<sup>12</sup>

Weight Frequencies for Wood 33 <sup>13</sup>		
Grams	Grains	Number of Specimens
6.20-29	95.680-97.069	2
6.10-19	94.137-95.526	6
6.00-09	92.594-93.982	10
5.90-99	91.050-92.436	8
5.80-89	89.507-90.896	4
5.70-79	87.964-89.353	2
5.60-69	86.421-87.809	3
5.50-59	84.877-86.266	1
5.40-49	83.334-84.723	2

However, while the main BRITISH TARS series is closely linked to 1797 and probably did not continue much later than the first decade of the nineteenth century, the metrological evidence may suggest that the Wood 33 imitations were not produced until several decades later.

The weight frequency tables show that the weight standard for Wood 33 was about 6 grams

(92.594 grains), somewhat lighter than the general standard for evasive halfpence, which hovers around 6.20 grams (95.68 grains). This lighter standard is consistent with the published weights for halfpenny tokens circulating in Upper and Lower Canada in the late 1820s and 1830s. These include Montreal *sou* tokens (Breton 674, 684), authentic and imitation Tiffin tokens (Breton 960-961), imitation Spread Eagle tokens (Breton 994), Seated Justice tokens (Breton 1011), Bust and Harp Tokens (Breton 1012), imitation Wellington halfpenny tokens (Breton 980), Vexator Canadiensis tokens (Breton 558-559).<sup>14</sup> The weight standard of Wood 33 is also consistent with the published weights for many of the locally produced Blacksmith tokens (Wood 4, 6-8, 11, 13-14). Thus it seems probable that Wood 33 was struck in imitation of Atkins 271 for export to Canada in the 1820s and 1830s. The relative scarcity of examples in the Bank of Montréal hoard suggests that Wood 33 may have been a latecomer that did not enter into broad circulation until the collapse of the Canadian token coinage in 1837.<sup>15</sup>

12 R.W. McLachlan, "The Canadian Wellington Tokens," *The Canadian Antiquarian and Numismatic Journal* 4 (1902): 41-49.

13 The data are drawn from the examples of Wood 33 in the collection of the American Numismatic Society, the Department of Special Collections, University of Notre Dame, and several private collections.

14 On the use of weight for developing the chronology of Canadian tokens, see G. Burns, "Observations on a Tiffin Token," *Canadian Numismatic Journal* 39.2 (March 1994): 66.

15 The author is indebted to John Kleeberg for this observation. For the hoard, see McLachlan 1889, 27-34.

Weight Frequencies for Evasive Coppers in the ANS Collection		
Grams	Grains	Number of Specimens
7.70-79	118.828-120.217	2
7.60-69	117.285-118.674	0
7.50-59	115.742-117.131	2
7.40-49	114.119-115.588	1
7.30-39	112.656-114.044	1
7.20-29	111.112-112.501	1
7.10-19	109.569-110.958	0
7.00-09	108.826-109.415	1
6.90-99	106.483-107.872	2
6.80-89	104.939-106.328	1
6.70-79	103.396-104.785	0
6.60-69	101.853-103.242	6
6.50-59	100.310-101.699	6
6.40-49	98.766-100.115	9
6.30-39	97.223-98.612	13
6.20-29	95.680-97.069	15
6.10-19	94.137-95.526	14
6.00-09	92.594-93.982	8
5.90-99	91.050-92.436	10
5.80-89	89.507-90.896	6
5.70-79	87.964-89.353	6
5.60-69	86.421-87.809	3
5.50-59	84.877-86.266	3
5.40-49	83.334-84.723	1
//		
4.90-99	75.618-77.007	1

On the other hand, an earlier production date for Wood 33 cannot be entirely ruled out, as the known weights are also plausible for the main series of evasive coppers in the 1790s and the first decade of the nineteenth century. It may be no accident that the weights of BRITISH TARS evasive coppers tend to fall in the lower end of the evasive frequency table and within the same range as Wood 33.<sup>16</sup>

The dating evidence provided by an apparent hoard of blacksmith coppers (including Wood 33) that came onto the U.S. numismatic market in 1979 and was recorded by L.B. Fauver is equivocal.<sup>17</sup> This hoard contained only Wood 33s (13), left-facing bust/Britannia types corresponding to Wood 1 (2), Wood 2 (2), Wood 3 (2), Wood 4 (4), Wood 11 (9), Wood 13 (4), Wood 14 (6), Wood 16 (1), Wood 17 (1), Wood 18 (4), and right-facing bust/Britannia Wood 23 (7). The involvement of the left-facing bust/ Britannia series, but none of the later mulings with imitative bust and

harp and SHIPS COLONIES & COMMERCE types (Wood 5-6 and 10), which must post-date 1825 and 1830, respectively, might possibly support an early date for Wood 33.

Nevertheless, the presence of Wood 23, which carries a Britannia reverse modeled on the reformed regal coppers of 1797, rather than the pre-reform coppers of 1770-1775 imitated by the left-facing bust series and Wood 33 suggests a later, but not necessarily significantly later, date. It is worth noting that most token producers operating after the copper reform of 1797 seem to have attempted to imitate the new redesigned form of Britannia. This new Britannia appears on the Broke (1814) and Genuine British Copper tokens (1815) struck for Nova Scotia by the English token producer, Thomas Halliday, as well as on his commerce pennies (1814) that circulated in Lower Canada.<sup>18</sup> She can also be found on the VICTORIA NOBIS EST tokens that must date after 1812 since they are frequently overstruck on Guppy halfpence, the Spread Eagle private

<sup>16</sup> Morris Hankins reports a weight range of 5.96 grams (92.1 grains) to 6.26 grams (96.7) for BRITISH TARS issues (personal communication).

<sup>17</sup> L.B. Fauver, "An Old Hoard of Blacksmiths," *Canadian Numismatic Journal* 25.1 (January 1980): 18-19.

<sup>18</sup> Charleton NS-7, NS-25-26, LC-47F



“Tiffin” Token (Breton 960). These tokens, struck to weight standard (5.3-6.6 grams / 89.791-101.853 grains) similar to that used for Wood 33, were imported from England to Lower Canada around 1832 by the Montréal grocer Joseph Tiffin. [Shown 1.5X actual size.] *Image courtesy the author.*



Canadian Blacksmith copper (Wood 11), exhibiting the crudity of style and the absence of a legend characteristic of blacksmith coppers produced in North America. [Shown 1.5X actual size.] *Image courtesy of Gary Trudgen.*

tokens of Montréal uttered in 1813 and imitated from 1814 to 1815, and the Wellington tokens which began to appear in Canada in 1814 and had flooded the country by 1817.<sup>19</sup> Lastly, the post-1797 form of Britannia appears on Wood-7 and 8 and the extremely rare penny, Charlton BL-15.

Because the obverse die of Wood 23 is also paired with store cards produced by Daniel and Benjamin True of Troy, New York around 1830, it has been customary to date the issue around 1835.<sup>20</sup> It was originally assumed that after heavy use on the store cards, the Trues employed the dies for tokens for shipment to Lower Canada, but John Lorenzo has convincingly argued that only the worn store card dies were obtained from the Trues by token producers in Lower Canada who struck the coppers locally.<sup>21</sup> If this is correct, then Wood-23 could predate the series muled with the store card dies by some years. The obverse die break is significantly smaller on Wood 23, than on Wood 24-25, indicating that the former was actually struck before the latter. The obverse rust damage reported by Wood on Wood 24-25 suggests that

after striking Wood 23 the die was poorly stored for a period of time before it was brought out again to produce the muled series in the 1830s. In this case, the pattern of use for Wood 23 with an initial phase using a Britannia reverse, followed by storage and a second period of production involving dies from other token series essentially mirrors that of Wood-1. After a period of storage when the obverse die was damaged by rust, it returned to service in the 1830s muled with a SHIPS COLONIES & COMMERCE obverse (Wood 9).

The question that remains open is why someone in the 1820s or 1830s would have faithfully copied a relatively corrupt version of an evasive halfpenny issue for the Canadian market. One

19 Charleton LC-49, LC 54, WE-1-8; R.W. McLachlan, “The Canadian Wellington Tokens,” *The Canadian Antiquarian and Numismatic Journal* 4 (1902): 41-49; P. Kranevald, “Wellington in Lower Canada,” *Numismatics International Bulletin* 29.7 (July 1994).

20 Charlton, BL-40.

21 John Lorenzo, “Canadian Blacksmith Tokens and the New York Connection,” *The C4 Newsletter* 6.2 (Summer 1998): 43-50.

can only speculate. Although Warren Baker has shown that it was not uncommon for individuals to find old worn coppers in Canadian circulation and then order further examples from coiners in Britain,<sup>22</sup> it is unclear whether this same mechanism was responsible for Wood 33. Unlike the other prototypes cited by Baker, to date there is still no evidence that Atkins 271, the model for Wood 33, ever saw North American circulation. Since the metrological evidence does not rule out production of Wood 33 in the period c. 1797-1813 it may be more reasonable to interpret these coppers as a late evasive issue that survived in storage until they were brought out in the late 1820s or 1830s to make a profit from the chaotic circulation of tokens in Canada.

Barring the discovery of some documentary evidence that might explain the importation of Wood 33, we may never know precisely why this variety was chosen for production and shipment to Canada. However, we hope that the preceding discussion has clearly shown that the variety must be understood as an immigrant evasive, rather than a home-grown blacksmith copper.

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22 W. Baker, "Some Overstruck Specimens of Br. 1008 and Other Notes on the Blacksmith Series," *Canadian Numismatic Journal* 30.10 (November 1985): 433-439.



## The Potosí Scandal and the Massachusetts Mint

by

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### Introduction

In the mid-1600s, when the world had been round for a barely one hundred years, a monetary crisis was taking shape on three continents, thousands of miles apart. The epicenter of this event was high in the Andes mountains where the destabilizing effects of the scandal at the Potosí Mint were beginning to be felt throughout Western Europe and the Americas, including the Caribbean rim and West Indies. What once had been a local situation, but officially ignored for years, had by the mid-century gained center stage creating a ripple effect that rapidly spread throughout world markets. This paper explores the possible influence of the debasement of a sizable portion of the world's currency standard on the creation and operation of the Massachusetts Bay Mint during the second half of the seventeenth-century.

### Background

Starting in 1532, Spanish *conquistadores* had conquered and subjugated the highly-civilized Incan empire, centered along the western highlands of South America, and, by 1535, had founded the coastal city of Lima to serve as the capital of the new Viceroyalty of Peru. Ten years later, four rich veins of silver were discovered at the 15,700-foot level in the eastern range of the Andes Mountains in an area destined to be incorporated into modern Bolivia. This bonanza attracted determined fortune-seekers from all over the world like flies to honey. Within two years, prospectors, miners, silver merchants, and the like, swelled the burgeoning boomtown of Potosí, founded at an elevation of 13,000 feet, 2,600 feet below the summit. From an initial population of 14,000 souls in 1547, the city swelled to an estimated 160,000 soon after the turn of the century making it by far the largest city in the New World, rivaling major world capitals in size.<sup>1</sup> Although Potosí grew into an affluent and bustling city with its opulent Spanish elegance enjoyed by the moneyed classes, there was also its darker side with the street violence of a teeming, multiethnic, polyglot "mining" town with its slaves, hired workers, and indigenous populations – the exploited and oppressed human machinery who scooped fortunes from the hillsides for the privileged few and heaped the royal coffers with treasure.<sup>2</sup>

The original mint for converting the silver into cobs, or "formless lumps of stamped bullion,"<sup>3</sup> was established in Lima in 1568, but due to the difficulty of transporting the ore from Potosí to the capital, it was decided four years later to relocate the mint closer to the source of the silver for both ease and economy. The Lima Mint, itself, had its own tarnished reputation when 10% of its 1569 output was determined to be underweight and the mint's treasurer investigated for fraud. At first the new mint was removed to La Plata, but that location was still too far from the mines and so in 1573 the entire operation was shifted 110 miles to Potosí while the old Lima facility was

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1 The estimated demographic breakdown in 1611 was 3,000 Spaniards, 40,000 non-Spanish Europeans, 35,000 American-born mixed racial Creoles, 76,000 indigenous Indians of various backgrounds, and 6,000 imported African slaves (John Demos, "The High Place: Potosí," [www.common-place.org](http://www.common-place.org); vol. 3, no. 4, July 2003; accessed 28 Sept. 2007).

2 Peter Bakewell, *Silver and Entrepreneurship in Seventeenth-Century Potosí* (Albuquerque, 1988), pp. 22-36.

3 See note 7.

converted into an official treasury assay center until reopened later in the next century.<sup>4</sup> From 1556 to 1783, an estimated 45,000 tons of pure silver were transported to the Pacific coast, shipped to Panama, and next carted overland to Caribbean ports for the final journey to Spain in the annual treasure fleet from which the king would receive his “royal fifth,” in this case estimated at 7,000 tons.

The reputation of this legendary *cerro rico* (rich mountain) traveled rapidly to Spain and the rest of Europe where the name *Potosí* became synonymous with treasure and the phrase, *valer un potosí* (to be worth a Potosí), came to mean anything of extraordinary worth, no doubt a further enticement for other adventurers to try their luck in the high Andes. In 1555, the well-respected historian, Augustin de Zárate, the former treasurer general of Peru, wrote of “the riche mines of Potosí” in his widely translated book.<sup>5</sup> We even read in the second part of Cervantes’s famous novel, first published in 1615, the dialogue between the lanky, knight-errant, Don Quixote, and his corpulent squire, Sancho Panza, referencing “the treasure of Venice” and “the mines of Potosí,”<sup>6</sup> two contexts that would be common knowledge to literate citizens of the era. Because so much of the world had become familiarized in such a relatively short time with this “mountain of silver,” honeycombed by a labyrinth of tunnels through which were harvested this seemingly limitless treasure, any incident impacting upon the popular, romanticized concepts of Potosí would surely gain immediate public attention, an event that did occur as our story unfurls.

### ***El Gran Engaño***

It did not take long before wealth, power, and greed gave way to corruption on the part of the Potosí Mint officials, mine owners, and silver merchants whose abuse of trust had become “business as usual” despite the fact they were stealing from the king. It was the duty of the assayers to determine and guarantee the authorized fineness of the bullion, cobs,<sup>7</sup> and coins originating under their surveillance for which service they were compensated with a small amount of the precious metal. To designate which assayer was entrusted for a particular analysis, the bars and coined money bore his official mark, usually an identifying initial. Under such a system, an assayer could not evade responsibility for the quality of the work produced during his term. Nowadays, when these mintmarks are compared with extant mint records, researchers have a reliable method enabling them to date the emission of any particular specimen. The lucrative position of chief assayer was a political plum sold by the king to a favorite as a personal monopoly. In turn, this senior official “rented” positions to his lieutenants who did the actual work. It appears that over the span of the scandal, these underlings did not earn enough through legitimate channels to pay the price of the “rent” and so devised some creative schemes to cover their expenses. “What the crown viewed as corruption and inefficiency, local elites and bureaucrats saw as merely the means to advance their own legitimate interests, albeit frequently at the

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4 Sewall Menzel, *Cobs, Pieces of Eight and Treasure Coins* (American Numismatic Society, New York, 2004) pp. 163-64, 173-74, 183, 197-98, 236. The Lima Mint reopened in 1577 to supply coins for local commerce but was put out of commission by a major earthquake in 1588. It was briefly reopened for one year in 1659 but then in 1684 remained operational for 68 years. The output from Potosí eclipsed by far that of the Lima Mint and during the era covered in this article, “Peruvian” money means Potosí coins.

5 *Historia de descubrimiento y conquista del Perú* (Antwerp, 1555); The 1581 English translation quoted.

6 “Si yo te hubiera de pagar ... conforme lo merece la grandeza y calidad de este remedio, el tesoro de Venecia, las minas de Potosí fueran poco para pagarte”; Miguel de Cervantes Saavedra, *El Ingenioso Hidalgo Don Quixote de la Mancha*, Part 2, Chapter LXXI from Juan Cano edition (Toronto, 1932) p.197.

7 Cobs were appropriately described as “formless lumps of stamped bullion” irregularly cut from assayed bars of silver and adjusted to proper weight (Robert Chalmers, *A History of Currency in the British Colonies* [London 1893; rep. 1972] p. 391).

expense of the crown.”<sup>8</sup> Another potential factor contributing to the stress of the silver merchants was that the annual registered silver production in the Potosí district, which had peaked in 1592, had begun a slow decline in output because of the depletion of accessible ore which from 1645 to 1650 had waned to about 60% of its historic high.<sup>9</sup>

This collusion involving assayers, silver merchants and other participants was not an isolated event confined to the 1650s as sometimes implied in the literature. As early as 1614, it had been reported to authorities in Lima that for some time fraud had been detected in the weight and fineness of money struck at the Potosí Mint. This irregularity was verified during an extensive investigation which, in 1616, resulted in the institution of a strict control of minting procedures. In 1626, assays conducted in Seville verified new adulterations in fineness but no official action was recorded. A royal order directed to the viceroy of Peru in 1633 complained that the Potosí Mint assayers were falling short of their obligations and, although warned to improve, the admonition produced no lasting effect, and the fraud continued unabated involving all levels of colonial officialdom.<sup>10</sup> More reduction in the fineness was reported from assays of Potosí coins in 1641 implicating several rich and powerful silver merchants. One local official observed in 1644 that this lack of personal accountability for their criminal activities just encouraged mint personnel to assume “greater liberty to adulterate the coinage.”<sup>11</sup> “Quality deteriorated noticeably between 1631 and 1648 to the point where pieces with clear dates or assayers initials are uncommon.” It can be assumed that these indistinct identifying marks of assayers, later charged with fraud, were not accidental mint errors.<sup>12</sup> More incidents of debasement were recognized in 1644 prompting a superficial investigation that was soon forgotten. The bottom line was that the adulteration at the mint continued unabated in both minted money and silver bullion with no definitive action taken since more pressing matters demanded Philip IV’s attention in Europe.<sup>13</sup> Later in 1650, when 2,952 *reales* from Potosí were melted and assayed at the Madrid Mint, there was only sufficient silver to recoin 2,203 *reales* at the authorized 0.931 fineness, amounting to a 25.4% deficiency. It was calculated if the fraud had continued at that same rate over the eight years the scandal was presumed to have existed, then the net embezzlement from the total of 38,600,000 pesos in four- and eight-*reales* coins received in the annual shipments of the treasure fleet during that period could be extrapolated to have approached nearly 10,000,000 pesos.<sup>14</sup>

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8 Freeman Craig, Jr., “Coinage of the Viceroyalty of El Perú – An Overview” from William L. Bischoff, ed., *The Coinage of El Perú*, Coinage of the Americas Conference, October 29-30, 1988, The American Numismatic Society, New York, p. 6; Arnaldo J. Cunietti-Ferrando, “Documentary Evidence for La Plata and Potosí” from Bischoff, ed., *The Coinage of El Perú*, pp. 71-73; Menzel, *Cobs*, p. 296 (quote from p. 296).

9 Bakewell, *Seventeenth-Century Potosí*, pp. 16-17; Peter Bakewell, *Miners of the Red Mountain: Indian Labor in Potosí 1545-1650* (Albuquerque, 1984). Although this decline in silver production has never been implicated as contributing to the scandal, it does signal the beginning of economic pressures on the mining industry in the region. *Las primeras décadas del siglo [XVII] fueron de gran producción minera*, comparable a la del siglo anterior, pero esta producción fue declinando en forma gradual a medida que avanzaba la centuria. Si en el año 1600 Potosí produjo 7,129,719 pesos de plata, en el año 1650 la producción sólo llegó a los 4,428,594 (Las Casas de Moneda Españolas en América del Sur, II – El XVII: un siglo en crisis; Estado general de la economía, p. 2; <http://www.tesorillo.com/articulos/libro/02.htm> accessed 15 October 2007).

10 Las Casas de Moneda Españolas – El XVII: un siglo en crisis; Las Rochunas, pp. 1-2.

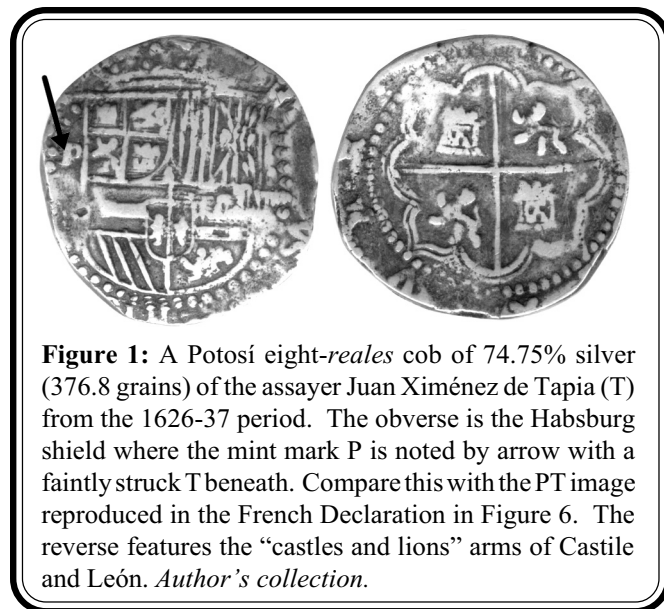
11 Bakewell, *Seventeenth-Century Potosí*, p. 37.

12 Arnaldo J. Cunietti-Ferrando, *Historia de la Real Casa de Moneda de Potosí, 1573-1825* (Buenos Aires, 1986) pp. 121-22; quote from Freeman, “Coinage of the Viceroyalty of El Perú,” p. 9.

13 Not surprising, this king lacked “his father’s interest in the economic and financial progress of the empire.” See Menzel, *Cobs*, p. 17.

14 Francisco Jovel and Roberto Jovel, “Los Efectos del ‘Gran Escándalo’ de Potosí en España” *passim*. [www.segoviamint.org/espanol/articulos/efectos\\_moneda\\_potosina\\_en\\_Espana.html](http://www.segoviamint.org/espanol/articulos/efectos_moneda_potosina_en_Espana.html) accessed 28 September 2007. A peso is another common name for a piece-of-eight-*reales*.

### Nestares versus the conspirators



Finally in 1648, the king was goaded into action after Spanish merchants were unwilling to accept the suspect money until it was assayed; also it was reported that pieces-of-eight-*reales* allocated for payment of the royal army lacked up to three *reales* in value. Philip appointed Dr. Francisco de Nestares Marín as his personal representative with full authority to investigate the fraud and punish the conspirators. Nestares came with the credentials of a priest, a former prosecutor and Inquisitor in Valladolid, and a doctor in civil and canon law.<sup>15</sup> After his arrival in Potosí in December 1648, Dr. Nestares enthusiastically pursued his assignment. The mint records were found to be inaccurate and

moreover a massive fraud in the Spanish colonial treasury in the Viceroyalty of Peru was uncovered. The treasurer and magistrate of the Potosí Mint were removed from office but while those officials held important positions, the actual day-to-day quality control was the responsibility of the assayers whose work came under Nestares's close scrutiny. The senior, non-working assayer (1633-49), Juan de Figueroa, during whose watch the majority of the scandal occurred, was heavily fined. Even though he did none of the hands-on work himself, he rented the assayer positions to a number of underlings who validated the actual coins. Since the initials or marks of these working assayers appeared on the coins, there was no way they could dodge accountability for the poor quality of the workmanship. One incriminated assayer, Felipe Ramírez de Arellano, whom Nestares considered to be the greatest offender at the mint, was not only fined but hanged and then decapitated. “Nestares determined that the fraud at the mint happened in part, because the lieutenants or subofficials were not receiving sufficient compensation for their work. Accordingly he recommended that such workers receive suitable increases.”<sup>16</sup> This was no doubt the nature of the web in which Ramírez de Arellano found himself entangled because he was renting his position from Figueroa, the senior assayer, at an annual fee much higher than his annual legal income.<sup>17</sup> Three prominent silver merchants were also adjudged guilty, one of whom was none other than the magistrate of the Inquisition in Potosí. This individual, Gómez de la Rocha, having been later convicted of a plot to murder Nestares, was garroted in January 1650. Substantial fines were levied on the other silver traders but they were still allowed to continue in business supplying the mint with metal. Several more conspirators were heavily fined; when the funds recovered from these fines and punishments were combined with other confiscations, Nestares netted about 1,500,000 pesos for the crown, an amount equal to about a two year's allocation of the “king's fifth” which was the fraction of treasure belonging to the monarch.<sup>18</sup> As

<sup>15</sup> Bakewell, *Seventeenth-Century Potosí*, p. 38.

<sup>16</sup> Menzel, *Cobs*, p. 297.

<sup>17</sup> Cunietti-Ferrando, “Documentary Evidence,” p. 73.

<sup>18</sup> Bakewell, *Seventeenth-Century Potosí*, pp. 38-44, 48.

a result of Nestares's investigations, some 42 mint personnel were convicted of complicity in the scandal, a number which did not include an additional 38 others from the surrounding area.<sup>19</sup>

The information concerning the substandard output from the Potosí Mint during this period is summarized in Table 1. These data, from Menzel's new authoritative book, clearly illustrate how "after 1619 there was a general decline in the silver fineness at Potosí, with certain assayers tolerating anywhere from 0.500 to 0.910 fine." Most of the coinage was in pieces-of-eight-*reales* that were typically poorly struck with illegible dates.<sup>20</sup>

**Table1:** Summary of Menzel's data on the Potosí assayers from 1613 to 1652. Discussion involves only pieces-of-eight-*reales* whose authorized weight was 423.9 grains (27.47 grams) and 0.931 fine (93.055% silver and 6.945% copper).<sup>21</sup>

Term	Assayer	Findings
1613-16	Augustín de la Quadra	His typical coins weighed 422.8 grains but their fineness may have been as low as 0.790.
1616-17	Juan Muñoz	Deficiencies reported in 1617; weights from 412.0 to 421.3 grains and fineness 0.911 to 0.934; Muñoz was replaced in mid-1617.
1617-18	Garcia de Paredes y Ulloa	Interim replacement for Muñoz; no data.
1618-47 1618-23 1626-37 1644-47	Juan Ximénez de Tapia	Served three terms as "working assayer" during that period; work generally crude. Assays 1619 = 0.935 fine; 1628 = 0.909 fine; 1645 = 0.889 fine; 1646 = 0.841 fine. From 1644-47 weights ranged from 382.7 to 429.0 grains.
1621-28	Pedro Martín de Palencia	Substandard work; weights from 395.0 to 419.8 grains and 0.883 fine.
1636-45; 1647	Pedro Teviño	Weights from 415.1 to 429.0 grains; fineness no greater than 0.909. Deported to Spain and executed for fraud; massive recall of his coins.
1646	Gerónimo Velázquez	Fineness as low as 0.500! Weights from 407.4 to 427.5 grains; coins generally melted down. Velázquez sent to Spain to face charges; outcome of investigation unknown.
1646-47	Luis de Peralta	His low quality coins recalled and melted.
1646-49	Felipe Ramírez de Arellano	Coins as low as 35% silver; called in and melted. Ramírez executed.
1647-49	Pedro Zambrano	Weights from 422.8 to 447.5 grains; many coins melted.
1649-51	Juan Rodríguez de Rodas	Both an official and "working assayer." Was replaced. Coins underweight by 93 grains and 0.810 fine. His eight <i>reales</i> revalued at 7½ <i>reales</i> because of scandal.
1651-78	Antonio de Ergueta	Both an official and "working assayer." Despite good quality, eight <i>reales</i> revalued to 6 <i>reales</i> ; counterstamped with crown (see text).

<sup>19</sup> Menzel, *Cobs*, p. 297.

<sup>20</sup> Menzel, *Cobs*, pp. 269, 271; coins were first dated in 1617; quote, p. 269.

<sup>21</sup> Menzel, *Cobs*, pp. 268-302; see also Cunietti-Ferrando, "Documentary Evidence," pp. 69-73. For standards, refer to Chalmers, *A History of Currency*, pp. 390-91, 402, and K.A. Dym "The First Assayers at Potosí," from Bischoff, ed., *The Coinage of El Perú*, p. 81.

## The Great Transition of 1652

Nestares imposed strict controls on the mint and the conduct of silver traders. The coinages of Zambrano, Peralta, Velázquez and Ramírez were removed from circulation and melted or significantly devalued. Other pre-1649 pieces-of-eight traded at six *reales* while those of Rodas and Ergueta, struck after the reforms were in place, circulated at seven-and-a-half *reales*. Since these still bore the old Habsburg emblem, they were counterstamped with a crown to indicate their validity as an approved currency. All minor coins were recalled to the mint for melting.<sup>22</sup> To clearly distinguish the output of the “rehabilitated” Potosí Mint from the debased coinage of the three prior decades, a complete change in design was ordered in December 1650 for silver coins from all mints in the Viceroyalty of Peru.<sup>23</sup> The obverse Habsburg shield was replaced with the quartered arms of Castile and León and the reverse with a “pillar and waves” motif, like the pre-1570 Mexican pattern, in a “tic-tac-toe” format. To eliminate any ambiguity as to who was responsible for the workmanship of the recoinage, each piece was plainly stamped on both sides with the year, the mint and the assayer’s privy mark. Quality production was maintained at the Potosí Mint for the rest of the sixteenth century although standards slackened into the 1700s due to a series of natural disasters and a continued depletion of high grade ore.<sup>24</sup>

## The consequences of the debasement<sup>25</sup>

The 1652 recoinage was injurious to the pocketbooks of Potosí citizens who stood to lose significantly since so much of their wealth was tied up in pre-1649 debased silver. A string of bankruptcies and foreclosures of properties engaged in the silver industry occurred with the financial hardship extending into Lima and peninsular Spain.<sup>26</sup> For the first half of the seventeenth-century, the royal attitude toward the debased Potosí coinage had been one of indifference but, even after Nestares’s new broom had swept clean, there were still lingering consequences from the three prior decades of dirt swept under the fiscal carpet that had to be reckoned with. The period of *laissez faire* came to an abrupt end in Europe where the adulterated money was not receivable in many locations until melted and assayed, obliging Spain to adopt a firm control of assay and assayers as a necessary means to minimize the effects of the discredited Peruvian money that heretofore had enjoyed an unblemished reputation and wide circulation throughout the Continent. Two major problems now confronted the king: the paralysis of commerce, and how to distinguish the good money from the bad.<sup>27</sup>

The debasement situation was critical if we take into account that since the discovery of America, millions of pesos in American gold and silver had been deposited annually in Spain where this newfound wealth was soon remitted to neighboring countries. Since Spain lacked basic

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22 All 4- and 8-*reales* coins minted prior to 1649 would pass after 1652 according to their assayers’ mark; see Table I and Menzel, *Cobs*, pp. 297-98.

Tapia (T); Teviño (TR): whose 8 reales = [after 1652] 6 reales; whose 4 reales = [after 1652] 3 reales  
Rodas (O); Ergueta (E): whose 8 reales = [after 1652] 7½ reales; whose 4 reales = [after 1652] 3¾ reales  
Zambrano (Z); Peralta (P); Velázquez (V); Ramírez (R): whose 8 reales = [after 1652] 4 reales; whose 4 reales = [after 1652] 2 reales

23 Operating in this era were Potosí, Santa Fe de Bogotá, and Cartagena (Menzel, *Cobs*, pp.396, 444).

24 These new features were difficult to implement on denominations below 4- and 8-*reales* (Menzel, *Cobs*, pp. 302, 316). Sumner states that “The work of the Peruvian mint [i.e. Potosí] soon deteriorated again [after 1653] and it was very variable” (William G. Sumner, “The Spanish Dollar and the Colonial Shilling,” *The American Historical Review*, vol. III, #4 [July, 1898], p. 611).

25 From Cunietti-Ferrando, *Historia de la Real Casa de Moneda de Potosí*, pp. 144-46.

26 Bakewell, *Seventeenth-Century Potosí*, pp. 43-44.

27 Jovel and Jovel, “*Gran Escándalo*,” pp. 4-5.”



**Figure 2:** A typical one-*real* (50.3 grains) from Mexico City with the arms of Castile and León on the obverse and the “pillar and waves” reverse, a motif used by the Mexico, Santo Domingo and Lima mints until 1570 when the Habsburg shield design was substituted at all New World facilities. The assayer of this coin was Luis Rodríguez whose term dated from 1546-67 during the reign of Charles and Johanna. *Author’s collection.*



**Figure 3:** Following 1652, the Habsburg coat of arms (see Figure 1) on all new Potosí coins was replaced with the “pillars and waves” motif – featuring the Pillars of Hercules and the *plus ultra* motto, a design which had been used previous to 1570 at the Mexico, Santo Domingo, and Lima mints (Menzel, *Cobs*, pp. 18-19, 302). The obverse is always the side with the king’s name, whether visibly struck up or not. (Left:) a 1680 two-*reales* cob from Potosí by the assayer V for Pedro de Villar. This is full weight at 105.1 grains but only 0.748 fine (see Menzel, *Cobs*, p. 330). *Author’s collection.* (Right:) a 1755 eight-*reales* from Potosí of the assayer Q, Luis de Quintanilla, at 398.2 grains (95% of full weight) and 0.857 fine. This series seldom has visible legends; here only the VI • D•G of Ferdinand VI can be recognized (see Menzel, *Cobs*, p. 352). *Author’s collection.*



**Figure 4:** A 1655 Mexico City eight-*reales* by the unidentified assayer P bearing the Habsburg obverse which was used after 1570. Some Mexican coins of this era were mistaken for Potosí silver and counterstamped in error with a crown (Menzel, *Cobs*, pp. 80, 298). *Photo courtesy American Numismatic Society; ANS 1934.1.563, gift of Julius Guttag.*



**Figure 5:** A 1683 well struck Spanish eight *reales* from the Segovia Mint, 408.6 grains, with Habsburg crest on the obverse and arms of Castile and León (castles and lions) on the reverse. The Segovia mint mark of the aqueduct is noted at 9:00 o’clock on the obverse. *Photo courtesy American Numismatic Society; ANS 1969.222.3287, gift of P. K. Anderson.*

industries and was not commercially independent, she was obliged to import far more merchandise than she exported. In addition, the country was saddled with the obligation to pay the massive external debt of the Habsburg monarchy.<sup>28</sup> So much silver entered Europe via the Spanish treasure fleet, that the bimetallic ratio of silver to gold increased from 11.5:1 to 16:1 by the early sixteenth-century.<sup>29</sup> "The gold and silver of America flowed in a steady stream [into Spain] and left for the Netherlands and elsewhere in a stream [just] as steady."<sup>30</sup> Problems were reported from two of Spain's important trading partners, Flanders (Spanish Netherlands) and Genoa who both lost faith in her circulating currency, threatening an economic catastrophe.<sup>31</sup> In Florence in 1661 "it was found necessary to prohibit the circulation of the silver *reals* [*sic*] of Peru and every other kind of Spanish silver, except at bullion value."<sup>32</sup>

Philip IV, with the guidance of a special economic council, issued a sovereign decree on October 1, 1650, mandated exclusively for Spain, where it produced catastrophic effects with public outcries and protests. Through this *pragmática*, it was ordered that within two months all private citizens were to take their Peruvian money, that did not conform to the law, to Spanish mints where it would be melted and adjusted to proper fineness. In a form of compensation to the owners, no additional fees for the service were to be charged. Those who did not wish to recoin their money were also required to present their coins to the mint to be cut through the middle to prevent circulation as currency; the fragments were then returned to the possessor. An alternative was to exchange the debased money for either Spanish *vellón*, an inferior billon coinage,<sup>33</sup> or standard 0.931 silver coins struck in Spain or Mexico at the rate of eight deficient Peruvian *reales* for eight *reales* of *vellón* or five of 0.931 fine silver, depending on the owner's preference.<sup>34</sup> The royal treasuries received payment for taxes in Peruvian money at the new price quotation. It is easy to imagine what this would have meant for the holders of Peruvian silver who saw their fortunes shrink from one day to the next without having any say in the matter. The devaluation of the currency generated a shortage of essential imported commodities and a great price inflation ensued. The king, in order to alleviate the tensions and avoid major disturbances, saw himself obliged days later to reconsider his position and announced an improvement in the new exchange rates by decreeing that the eight Peruvian *reales* were to be accepted at six *reales* of good silver or nine of *vellón*, and the *tostón*, (a fractional coin of four *reales*) was to be equivalent for three *reales* [of good silver]. Later, further distinctions were put in place when the recoined Peruvian money of proper fineness after 1652 could be exchanged at par for coins of equal value struck in Mexico or Spanish mints, neither of which had been tainted by the scandal, creating an equivalence for the Potosí peso at 12 *reales* of *vellón* and six for the half-peso.<sup>35</sup>

To further complicate matters, a great influx of counterfeit Peruvian money entered Spain from France and Portugal. These false eight *reales* were silver-plated copper with Peruvian impressions and worth no more than one-and-a-half-*real*. It was ordered that they neither circulate nor be permitted in any payment with the additional warning that anyone who tried to

28 Cunietti-Ferrando, *Historia de la Real Casa de Moneda de Potosí*, p. 144.

29 Craig, "Coinage of the Viceroyalty," p. 7.

30 W.A. Shaw, *The History of Currency 1252-1894* (London 1896) 2nd ed. repr., pp. 106-12, quote p. 108.

31 Silver, traceable to Potosí by neutron activation analysis, has only been found in post-1550 coins from Spain and Italy [Genoa, Milan and Venice] contrary to the supposition that this silver was widely used by several European mints (Adon A. and Jeanne P. Gordus, "Identification of Potosí Silver Usage in Sixteenth-Seventeenth Century European Coinage through Gold-Impurity Content of Coins" from Bischoff, ed. *The Coinage of El Perú*, pp. 21-42).

32 Shaw, *The History of Currency*, p. 95. "Peru" and "Peruvian" in this era refer to the Potosí Mint.

33 The official exchange rate between these two coins was set at two *reales de vellón* to one *real de plata*.

34 Thus the Potosí money was made equivalent to only 62.5% of either Spanish or Mexican 0.931 silver.

35 The Spanish *vellón*, the billon coinage of reduced value, now passed at two-thirds the rate of 0.931 silver.



negotiate them would receive the same punishment as those who uttered counterfeits. On March 24, 1651, the prescribed period for the conversion of Peruvian money in Spain expired, excepting those coins considered counterfeit whose possession would subject their holders to the punishment established for this crime.

A royal decree from the French king on December 3, 1648, reissued two years later,<sup>36</sup> advised his countrymen “of the damage and loss which our subjects suffer by the introduction of certain reales made in Peru.” Because the Peruvian “*Reaux*” were “so defective in standard ... and altered in fineness,”<sup>37</sup> the money was demonetized and for those apprehended spending or receiving the outlawed coins, penalties were prescribed, ranging from fines and confiscation to corporal punishment. It was further ordered that the adulterated silver be brought to the mint, cut, melted and recoin, free of charge, into *Louis d’argent* (*écus*), and that the owners would be compensated according to the results of the assay. Coins of proper weight would still circulate at their ordinary value. To help the public distinguish between the acceptable and forbidden currency, illustrations of the prohibited coins were published with the following descriptions: “... for the [old as well as new] Spanish *reales* [with defectiveness in the standard] made in Peru, whose illustrations are represented below, which are different from other *reales* of Spain, in that some of the *reales* of Peru have at the side of the coat of arms only a ‘P’ and others have a ‘PB’, ‘PR’, ‘PT’, ‘PQ’ or another letter below the ‘P’ ....” A distinction was made for the “*Reaux de Mexique*” with its specific mintmark and identifiable reverse.<sup>38</sup> From these documents, it is obvious that the Potosí devaluation had a great impact on this neighboring economy and in fact this French edict was first promulgated even before Nestares had begun his crackdown at the Potosí Mint. The fact that the deficient Potosí coinage circulated as long as it did despite the common knowledge of its inadequacy suggests that for years it had been coasting along on the unsullied reputation of Mexican silver.

In 1651, great quantities of counterfeit and clipped English money and “base Peru-pieces” were imposed upon merchants in Dublin and Waterford. This base coinage had been sent over from England, a “villainy” for which some of the guilty English agents were executed. Reacting to this deceit, a proclamation, issued late in 1652, ordered that “the base Peru-pieces [pass] for their intrinsic value only” since by “an exact assay,” it was determined that the Peruvian silver, passing at four shillings and six pence, contained no more than two shillings and four pence in value – amounting to a 52% fraud.<sup>39</sup> There is a paucity of reference concerning Peruvian silver from England during this period because of the major commitment of all parties to the raging Civil War, although a few cast counterfeit Spanish-American eight *reales* were recovered in the Middleham hoard concealed in 1646-47.<sup>40</sup>

Returning to the New World, the Viceroyalty of New Spain (Mexico) had an adequate supply of good silver from the Mexico City Mint to cover all domestic needs, and thus that area was immune from the effects of the debased Peruvian money where its circulation was insignificant.

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36 *Declaration du Roy*; 1650, 11 décembre, incorporating the prior judgments of 3 December 1648 and 28 November 1650; [http://www.ordonnances.org/regnes/louis14/1648\\_1652.html#1650](http://www.ordonnances.org/regnes/louis14/1648_1652.html#1650), accessed 24 November 2007.

37 “... du dommage & perte que souffrent nos sujets par l’introduction de certains Reaux fabriquez au Perou, si defectueux au titre, que par les essays & fontes qu’ils en ont fait faire, ils se trouvent la plupart d’iceux alterez dans le fin ...”

38 The reverse cross on Mexican silver after 1570 resembles a cross of St. Thomas with prominent terminal bulbs, a design easily distinguished from those of other Spanish-American mints. See Menzel, *Cobs*, p. 21.

39 James Simon, *An Essay towards an Historical Account of Irish Coins* (Dublin 1749, repr. 1975), p. 49.

40 Shaw, *The History of Currency*, pp. 149-50; Craig Barclay and Edward Besly, *A Little Barrel of Ducatoons* (York, 1994), pp. 34, 36. Louis Jordan notes that there is no reference to this debasement in English parliamentary records from the mid-1650s (personal communication, April 22, 2008).

*ENSVIVENT LES FIGURES des Reaux décriez par la presente Declaration ; Ensemble l'évaluation desdites especes au marc, & le prix qui en sera donné par les Maistres des Monnoyes, & Changeurs de ce Royaume.*



**Figure 6:** Images of Potosí eight-reales from the royal Declaration of 11 December 1650 by which they were demonetized and ordered to be melted, assayed and restruck at French mints into coins of Louis XIV. The declaration reads in part: "Following [are] the pictures of the pieces-of-eight *reales* discredited by the present declaration; together [with] the evaluation of the said hard money to the marc [of silver], and the price that will be given by the Mint masters and the royal money changers." A description follows: "... the said pieces-of-eight of Peru have at the side of the shield a P alone, and some others have a PB, PR, PT [see Figure 1], PQ, or some other letter under the said P ...." "All such coins were demonetized ... and to be taken to the mint or money changers to be melted, assayed, and converted into hard money with the imprint and arms of his Majesty [Louis XIV]." These Peruvians were identifiable by the P mint mark and the assayers initials which typically were not clearly struck. [http://www.ordonnances.org/regnes/louis14/1648\\_1652.html#1650](http://www.ordonnances.org/regnes/louis14/1648_1652.html#1650)

Unfortunately the devaluation of the Potosí money provoked a catastrophic reaction in Central and South America with severe disturbances in commerce. In Peru, once stable prices of daily necessities escalated overnight by 25% and even day-laborers and street vendors demanded sound money.<sup>41</sup> In Mexico, and also in New Granada (modern Colombia) and Panama, the devaluation of Potosí coinage was in place before it was imposed in Peru itself. The *Pragmática* of 1650 decreed exactly how deficient Peruvian pesos would be exchanged for stable Mexican money,<sup>42</sup> notwithstanding that until then, coins from Potosi had a better reception amounting to

41 Cunietti-Ferrando, *Historia de la Real Casa de Moneda de Potosí*, pp. 153-55.

42 See note 22.

a premium of more than a half-*real* per peso. Since so much panic and apprehension spread in Mexico over the possible introduction of Peruvian money, the viceroy of New Spain forbade its acceptance despite the September 23, 1653 royal edict requiring acceptance of the new money in all Spanish domains.<sup>43</sup> Even in 1654, when already the new “pillar and waves” money from Potosí was introduced into circulation, the Mexican viceroy still refused to budge in his determination to boycott the reformed Peruvian money at its nominal value until ordered by a regal mandate to do so.

In the famous markets of Portobello<sup>44</sup> and Panama where enormous volumes of imported European goods entered South American commerce, Spanish merchants, in 1651, refused almost without exception Potosí money, creating a great impact on the Peruvian economy if we bear in mind that the annual transactions conducted there would exceed 30 million pesos in goods destined for Lima. In Venezuela, the rejection of the Potosí money spread rapidly, not withstanding that the governor decreed that pieces already devalued or counterstamped shall be accepted for their reduced value except for those coins that visibly showed an increased mixture of copper indicating they ought to be removed from circulation. In the retail trade, only Mexican money or other coins of one- or two- *reales* were accepted. The same situation occurred in Santo Domingo, where there was such a lack of confidence in the circulating currency, they returned to the primitive system of commodity money. Guatemala initially turned a deaf ear to the devaluation, until their good Mexican and Spanish money disappeared from circulation leaving only deficient Peruvian money available whose presence encouraged more base coins to flow into the region from the outside, just as Gresham’s Law would have predicted. On May 16, 1653, authorities prohibited the circulation of *moclonos*, one of the nicknames given to the weak Peruvian money, which were gathered up to sent to the mint for assay and reduction into ingots for recoinage. In the Viceroyalty of New Granada, Peruvian money was melted and restamped at the Santa Fe de Bogotá Mint.

As in any financial panic, there are always those prepared to benefit at the expense of the less fortunate as reported from Buenos Aires where the governor was accused of keeping the order for the devaluation secret until August 1652 while his friends hurried to pay their indebtedness with the weak money even though the maturity of their notes was not until several months in the future. The governor, according to his enemies, had exchanged the good money in the royal coffers with his own deficient money benefiting by several thousand pesos. All these situations described above aroused a suspicious public to examine in minute detail each piece received in payment – an action which significantly delayed business transactions and complicated accounting practices in commercial and government records wherein money was itemized according to its quality and intrinsic value.<sup>45</sup>

### Spanish silver in British North America

According to Chalmers, “Barbados may most fittingly be chosen as the starting point in studying the detailed history of currency in the British colonies.” Following settlement in 1625, its staple commodities, cotton and tobacco, “formed part, if not the whole of the circulatory medium of the

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43 Menzel, *Cobs*, p. 316.

44 The city in Panama whence the annual treasure fleet of South American silver set sail. On its western journey, this same convoy replenished the Spanish colonist with European consumer goods, wines and other necessities (Frank Sedwick, *The Practical Book of Cobs* 2<sup>nd</sup> ed. [Maitland, FL, 1990]) pp. 46-54; Demos, “The High Place: Potosí”).

45 The above paragraphs are based on Cunietti-Ferrando, *Historia de la Real Casa de Moneda de Potosí*, pp. 171-77.

infant colony” until these products were replaced in a few years by sugar.<sup>46</sup> Even though hard money was in short supply, an act of 1662 determined that “all peices [*sic*] of eight of Ciuvel [Seville] Mexico & ye Pillar pieces shall pass current at ye rate of 4s. 8d. [i.e. 7d. per *real*] a peice [*sic*] currant money of England [i.e. sterling].” Two important facts are to be noted here: first and foremost Peruvian silver, conspicuously absent from this schedule, is not mentioned until 1670. Secondly, this was the beginning of “crying-up” [*vide supra*] of Spanish silver since earlier records show that one Spanish *real* had previously passed both in Barbados and Bermuda at 6d, sterling, or 4s, sterling, per piece-of-eight.<sup>47</sup> Then in 1668, an act in Barbados raised Seville, Mexico and Pillar dollars to 5s, sterling [i.e. 7½d per *real*]. This overrating of the piece-of-eight attracted counterfeit and lightweight coins into the area resulting in more legislation on December 22, 1669 calculated to curtail the circulation of “several corrupt and exceeding light pieces of eight lately sent to this Island by some persons designing their own profit and advantage, though with the great damage and ruin of the prosperity and welfare of this Island.” The coins, also described as “less in weight and of a baser alloy than usual,”<sup>48</sup> may possibly have been Peruvians attracted to the island and this could explain why we find this debased money mentioned only after 1670 but not earlier; this influx of light and base coins may have been the precipitating event for publication of the dual rating of Spanish-American silver as outlined in Table 2.

Beginning in 1631, merchants of Puritan Boston commenced a lucrative trade with the West Indies – St. Kitts, Barbados and the Bahamas in particular.<sup>49</sup> From a list of the relative values of foreign coins circulating in Barbados prior to 1662, we can get some idea of what species of money could have flowed north into New England as this commerce flourished. This inventory included English guineas, and their proportional parts; Dutch riders and Rix-dollars; Cross dollars of the Spanish Netherlands; French double pistoles, crowns, and *quarts-d’écu*;<sup>50</sup> Spanish double pistoles; and Mexico, Seville and Pillar pieces-of-eight. Again, no mention of Peruvians. Although the bulk of the circulating Spanish silver in the islands was significantly clipped, the coins continued to pass by tale and were thus overvalued in relationship to full weight coins; later, clipped coins were to pass at a rate determined by their weight, a practice first inaugurated in Antigua in 1699. Over the second half of the seventeenth-century, the Seville, Mexico and Pillar pieces-of-eight circulating both in the West Indies and mainland colonies were competitively “cried-up” in value in order to discourage export to England and thereby encouraging retention for local commerce.<sup>51</sup> As a further complication, counterfeit coins “in brasse or copper” made an appearance as reported in Bermuda in 1653.<sup>52</sup>

The disordered Spanish-American money with its subsequent devaluation reported from the regions around the Caribbean rim, including Santo Domingo, would be bound to affect Jamaica which had been occupied by the English since 1655 and but not officially ceded by Spain until

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46 For commodity money in Barbados, see John J. McCusker and Russell R. Menard, “The Sugar Industry in the Seventeenth Century,” from Stuart B. Schwartz, *Tropical Babels*, Sugar and the Making of the Atlantic World, 1450-1680 (Chapel Hill, 2004) chap. 9. Recall how in 1650 when Santo Domingo lacked adequate Spanish silver, they reverted to commodities monies. See Chalmers, *A History of Currency*, p. 100, for the approach to barter in Jamaica with commodities, a system “which prevailed in other West Indian colonies.”

47 Chalmers, *A History of Currency*, pp. 46-50.

48 Chalmers, *A History of Currency*, p. 49.

49 Larry D. Gregg, “The Barbados Connection: John Parris and the Early New England Trade with the West Indies,” *New England Historical and Genealogical Register*, vol. 140 (1986) pp. 99-113.

50 The so-called “cardecue,” an English language corruption of the French *quart-d’écu*, came into England as part of the dowry of Marie Henrietta, the French wife of Charles I. The French money entered primarily from trade with St. Kitts, an island jointly owned with France.

51 Chalmers, *A History of Currency*, pp. 7-8, 48-50, 64-68, 100.

52 Chalmers, *A History of Currency*, pp. 152-53.

1670. This island was the most commercially prosperous English-speaking possession in the West Indies whose dominant currency was the piece-of-eight-*reales*, because, as it was said, the colony “is most commodiously seated in the midst of the Spaniards” where it became the center of trade between England and Spanish America. In a far less legitimate relationship, English pirates, who sought sanctuary in Jamaica, liberally plundered Spanish shipping and squandered their ill-gotten wealth in the island adding to its abundant local money supply. One observer, writing in 1674, noted how the English “drain the benefits of their [the Spanish] gold and silver mines without their labour and expenses.”

In 1671, the first official measure taken in Jamaica regarding Spanish silver set the rate for “Pillar, Sevil or Mexico” coins at five shillings, local money of account. Significantly, coins from Peru or Potosí were not recognized until ten years later when the “Peru Piece of Eight” was regulated to pass for only “Four shillings” or 20% below the value established for other Spanish and Mexican specie. This official discount was “an indication of the early prevalence, and subsequent distrust” of Potosí cobs within the British West Indies and was similar to the action initiated in the Leeward Islands (St. Kitts, Antigua, Montserrat and Nevis) in 1670 where a 16.67% reduction below the other silver was mandated.<sup>53</sup> This discrimination not only involved the “old” coins from the period of the Peruvian silver scandal but also the “new” money minted when the authorized standards were followed. The net effect was that Potosí coins were practically demonetized within the English-speaking islands.<sup>54</sup> One problem is that we do not know at what rate Peruvian silver was received in the market place, if acceptable at all, during the earlier interval of about 22 years from the time the debasement became common knowledge and 1670, when the English-speaking islands first published their exchange tables. A single item from April 11, 1670, reported that the Assembly of Jamaica voted “that Peru money should not be made equal with Pillar ...” but unfortunately the commentary does not include any of the details of the debate.<sup>55</sup> The obvious conclusion was that the distrust of Potosí silver continued.

In this context, “pillar” pieces-of-eight refers to coins showing the “pillar and waves” motif initially struck on the substantial output from the Mexico City Mint from its founding in 1536 until 1570 (Figure 2), and on the limited coinage from Santo Domingo, 1542 to 1564, and briefly from Lima, 1568 to 1570. After 1570, the obverse style was changed everywhere to the heraldic shield of the Habsburg dynasty (Figure 4). Following the scandal, the Habsburg crest was ordered replaced with the “pillars and waves” design on all coinages from mints within the Viceroyalty of Peru (which in the 1650s were Bogotá, Cartagena, and Potosí) to distinguish the newly rehabilitated coinage from the debased Potosí issues (Figure 3).<sup>56</sup> The Habsburg shield was unchanged on the untainted Mexican silver and their earlier “pillar” coins were easily identified by the distinctive mintmark and reverse cross. Pieces-of-eight from peninsular Spain, called “Seville,” “Sevil,” or “Ciuel [Civel],” differed sufficiently from colonial issues in legends and designs making them easily recognizable. Chalmers opined that “Peruvians” referred to all “cobs,” irrespective of mintmark, and that “pillar pieces” meant any round coin regardless of origin.<sup>57</sup> However, one could make the case that “pillar” pieces could mean silver from any mint prior to 1570 or after 1653 from Potosí – two periods when assays were reliable. (The “pillar” coins

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53 Chalmers, *A History of Currency*, pp. 8, 97.

54 Chalmers, *A History of Currency*, pp. 64, 97-100. “...every Ciuell [Seville], Mexico, and Pellare [pillar], Piece of eight at Sixe shillings, and every old Peru and new at five shillings ye piece ... .” Note that this 1670 action in the Leeward Islands also discriminated against “new” Potosí coins minted after 1652.

55 *Calendar of State Papers, Colonial Series, America and the West Indies, 1677-1680*, Volume 10, p. 58.

56 Menzel, *Cobs*, pp. 18-22, 444. The silver output from Santa Fe de Bogotá and Cartagena was very small.

57 Chalmers, *A History of Currency*, p. 391. See also Louis Jordan, *John Hull, the Mint and the Economics of Massachusetts Coinage* (C4, 2002) pp. 154-55.

of this period are not to be confused with the machine-struck round “pillar milled dollars” of the “*dos mundos*” design first minted in 1732.)

Even as late as 1694, when presumably the Potosí Mint had been issuing standard value silver for about 45 years, the Leeward Islands repeated the disparity between [1] Peru pieces-of-eight at five shillings local money and [2] the Seville, Mexican, Pillar pieces and the French crowns at six shillings.<sup>58</sup> This acknowledgment of Potosí money in 1694 presumes that remnants of the debased coinage were still in circulation at that time. By an act of March 26, 1699, the island of Antigua, among other innovations, introduced the exchange of silver by weight on a sliding scale to compensate for clipping; while rating full weight Mexican and Seville eight *reales* at seven local shillings, it allowed Peru pieces-of-eight and Cross and Lion dollars, without weighing, to pass at five shillings.<sup>59</sup> Jamaica, the Leeward Islands in general, and specifically Antigua, are the only locations where the presence of Peruvians was cited by Chalmers whose historical work on the currency of the British Colonies is the most comprehensive of the period. In each instance, these coins as noted in Table 2 were devalued anywhere from 16.7% to 28.6% as compared to other Spanish silver, although reference to Table 1 would suggest that the level of deficiency within many of the adulterated emissions since 1613 was far greater and that this published reduction may have been an insufficient concession.

**Table 2:** Recorded presence of the different species of Spanish eight-*reales* in the British West Indies with their ratings in sterling, where indicated, or otherwise in local money of account. Note the progressive “crying-up.” The Proclamation of 1704 appears to treat these coins on a theoretical, rather than actual basis. See text. Data from Chalmers, *A History of Currency*, *passim*.

Location/date	Seville	Mexico	Pillar	Peru
Barbados 1662	4s 8d sterling	4s 8d sterling	4s 8d sterling	-
Barbados 1668	5s sterling	5s sterling	5s sterling	-
Leeward Islands 1670	6s	6s	6s	5s
Jamaica 1671	5s	5s	5s	-
Jamaica 1681	5s	5s	5s	4s
Leeward Islands 1694	6s	6s	6s	5s
Antigua 1699	7s	7s	-	5s
Proclamation of 1704	54d sterling	54d sterling	-	53d sterling

Looking ahead a few years to the Proclamation of 1704, there was an attempt by the metropolitan government to regulate the “crying-up” – or inflation – of silver as it was occurring in the colonies to augment its local value. The result was an unenforceable edict which forbade silver to be advanced by more than a third over what it passed in England. The assayed value of the world’s prominent circulating silver coins, prepared by Sir Isaac Newton, included the full weight Peruvian eight *reales*, *old plate*, rated at 53d, sterling, just 1d below the Mexican and Seville pieces at 54d.

<sup>58</sup> Chalmers, *A History of Currency*, p. 65; however, there was an unexplained provision in this 1694 act whereby a single Peruvian *real* would pass at 9d rather than the customary 7½d, or at the same rate as Seville and Mexican silver, “any Law, Custom, or Usage to the contrary notwithstanding.”

<sup>59</sup> Chalmers, *A History of Currency*, pp. 66-67. The Cross Dollar was a crowned-sized coin of 48 stuivers from the Spanish-Netherlands and the Lion Dollar, a Dutch trade coin from the United Provinces; by this scale, the Cross Dollar, equal almost to a French crown, was significantly underrated. See Philip L. Mossman, *Money of the American Colonies and Confederation* (New York, 1992) pp. 50, 51, 63-68.

This valuation stands in distinct contradiction to several West Indies acts just cited – but why? In his analysis of the Proclamation of 1704, William Sumner opined that the Proclamation was specifying Spanish silver coins that for all practical purposes were fictional; a full weight piece-of-eight (17½ pennyweights) “corresponded to the interpretation of ‘proclamation,’ but no such coin had existed since the early seventeenth-century.”<sup>60</sup> Similarly, we see that the Proclamation indicated *old plate* Peruvian silver, i.e. 0.93033 fine, a situation that appears to be more theoretical than actual, since Potosí money was far below authorized standards. (Sumner was unable to find the original documents on which the Proclamation was based.<sup>61</sup>) Even as late as 1717, Newton labeled the Peruvian silver “of uncertain allay.”<sup>62</sup>

### The New England connection

To return to the opening premise, did the events occurring on a far-off Peruvian mountain side and the resultant financial upheavals in global financial centers have any consequences upon the pecuniary history of the Massachusetts Bay colony? Considering the factors forming a possible linkage between the adulterated Peruvian money and John Hull’s mint, we know the debasement was common knowledge and that this devalued silver had been demonetized and reprocessed by Spain and her European trading partners as early as 1648. New England merchants, who had a presence in the West Indies since 1639, doubtless would have heard through commercial channels that Potosí money was unreliable and it was certainly no secret that Spanish-American mints were reprocessing Potosí money in the 1650s. As trade developed with the West Indies, silver flowed into northern ports particularly from Jamaica after 1655 when the island became the prime trading center between English and Spanish interests whose profits, especially from the slave trade, produced a steady stream of specie that enriched both colonial and London merchants. Since the North American colonies in turn were dependent on the mother country for their own manufactured goods, “it was estimated by one observer that coin did not circulate in the colonies more than six months before it was gathered up and remitted to England.”<sup>63</sup> Northern colonists, in this case New Englanders, found themselves squeezed for sufficient hard money for both local commerce and foreign exchange; since specie was not always available, overseas transactions were conducted by New England shippers, if not by credit, then by various commodity currencies such as fish, beef, pork, and barrel-staves.<sup>64</sup> But as the West Indies trade matured, mainland British North America now acquired a ready source of hard money including Dutch, French and especially Spanish-American coins, which for the most part were clipped and may have contained debased Potosí silver. Chalmers makes the connection: “And the predominance of these light weight coins (and counterfeit money), coupled with the inconvenience of barter and of an inadequate medium of circulation, led the colony of New England on 31<sup>st</sup> May 1652, boldly to set about minting money for itself ‘of good silver of the just allay of new sterling English mony ...’”<sup>65</sup> Herein is expressed the potential link between a portion of the treasure from the *cerro rico* of the Andean highlands that circulated at a discount in the West Indies and the Boston Mint of John Hull.

The official position supporting the creation of a mint in Boston was the need to supply a reliable, regional currency that would stay within New England. An additional benefit from a local mint

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60 Sumner, “The Spanish Dollar,” pp. 613-14.

61 Sumner, “The Spanish Dollar,” p. 607 n.1.

62 Chalmers, *A History of Currency*, p. 391.

63 Curtis P. Nettles, *The Money Supply of the American Colonies Before 1720* (New York, 1964 repr.) pp. 13, 15.

64 William B. Weedon, *Economic and Social History of New England 1620-1789* (Boston, 1890) vol. 1, p. 137.

65 *A History of Currency*, pp. 8-9.

would be to reduce the hodgepodge of money filtering through the area ranging anywhere from severely clipped, lightweight, debased, to frankly counterfeit coins by which many people were being deceived and inconvenienced. While the evils of underweight coins can be compensated on a scale, any adulterated money required an assay. In any case, John Hull, for a fee, was competent to correct both deficiencies by standardizing the potpourri of silver originating in the West Indies and bringing weak money up to sterling fineness or reducing good Spanish silver from its 0.93066 standard, whatever the case may be.

To elaborate further about the rationale for the Massachusetts Mint, Joseph Felt, in his *Historical Account of Massachusetts Currency*, related how “European merchants” were still drawing off the specie earned by Boston shippers in their commerce with the Dutch and “Western Islands” and, in order to retain some of this earned money at home to benefit local commerce, “the Legislature determined to set up a mint of their own.” He continued this 1650 entry:<sup>66</sup>

An additional cause for such a purpose [to create a mint], is, that our vessels, which traded to the West Indies, took considerable quantities of ‘light Spanish coyne’<sup>67</sup> whereby many people were cousened<sup>68</sup> & the Colony [Massachusetts Bay] in danger of being undone thereby’; and to prevent this deception, it was deemed requisite to have this coin melted down here, and stamped according to its weight and value.

Another retrospective account regarding the establishment of the Boston Mint related:<sup>69</sup>

The trade of the province increasing, especially with the West Indies, where the buccaneers or pirates at this time were numerous, and part of the wealth they took from the Spaniards as well as what was produced by the trade being brought to New-England in bullion, it was thought necessary, for preventing fraud in money, to erect a mint for coining shillings, six-pences and three-pences ... .

From the personal diary of mintmaster, John Hull, we read further: “... also upon occasion of much counterfeit coin brought in the country, and much loss accruing in that respect (and that did occasion a stoppage of trade), the General Court ordered a mint to be set up, and to coin it, bringing it to the sterling standard for fineness ... .”<sup>70</sup> There is no further explanation of what Hull meant by “much counterfeit coin” or “the stoppage of trade.” The counterfeit eight-*reales* “in brasse or copper” reported from Bermuda in 1653 may have been the same sort of coin that Hull referenced in his diary. If these were debased Potosi coins arriving in Boston, it seems likely that a professional silversmith would have identified them as adulterated silver and not have labeled them counterfeit. Although the origin of the Spanish-American silver reaching New England was never specified, it was abundantly clear that most of the coins were well clipped with not “one in a 100” at “17½ dwts.”<sup>71</sup> It is important to emphasize that the Massachusetts Mint did *not* function

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66 (Boston, 1839, repr. 1968) p. 30. This entry was *not* written in 1650 but rather Felt excerpted part from a 1684 document prepared as an argument to defend the Massachusetts charter threatened by revocation because of the establishment of the mint. Felt, ascribing this passage to 1650, must have assumed that this statement, written 34 years after the fact, accurately reflected the sentiment at the time the mint was initially conceived. See Sylvester S. Crosby, *The Early Coins of America* (Boston, 1875, repr. 1976) p. 76, and Jordan, *John Hull*, pp. 264-65. Personal communication, Louis Jordan, October 22, 2007.

67 Felt’s passage is a paraphrase of the original which says “light base Spanish Money” as seen in the original quote cited in Chalmers and Crosby. The inclusion of the word “base” could be reasonably interpreted as including adulterated Potosí coin.

68 *cozened* – deceived by artful trickery. See also Chalmers, *A History of Currency*, pp. 8-9.

69 Crosby, *Early Coins*, p. 32. Account written by Thomas Hutchison in 1764.

70 Crosby, *Early Coins*, pp. 31-32.

71 Chalmers, *A History of Currency*, pp. 8n, 10-11. Another early observer noted that all Spanish silver arriving in Boston was not from commercial ventures but also included pirate plunder (Crosby, *Early Coins*, p. 29).



as a public service facility to cull clipped or defective coins from circulation and then reprocess them into a dependable coinage. By law, the mint was stipulated to receive large consignments, usually several hundred ounces of "bullion, plate and Spanish coins," from private depositors who had to pay to have their miscellaneous silver assayed, adjusted and rendered into a trustworthy local currency which they would receive in exchange. For every full weight Spanish eight *reales*, passing at 5s, consigned for recoinage into Massachusetts money, the mint patron would clear a profit of 6d after Hull's commission and wastage allowance had been deducted. "Clearly, it was more advantageous to bring full weight coins to the mint for conversion into Massachusetts shillings."<sup>72</sup>

As previously stated, by 1652 New England merchants must have been aware that European and Spanish-American mints had been recoinage deficient Potosí money to bring it up to standard. Anyone, anywhere, holding Potosí silver, would have lost at least 25% of its value in exchange after the scandal broke. When recoinage of this weak currency was ordered in France in 1648 and Spain in 1650, in both instances, mint fees were waived as a measure to assuage the outrage of those innocent citizens victimized by the scandal so as not to add an additional burden to their already financial loss. Now if a New England sea captain, returning from the West Indies, had received Potosí money for his goods, there were potential fiscal consequences if he delivered this silver to the Massachusetts Mint for recoinage. He would be guaranteed that no suspension of mint fees would ever be offered, no matter what the value of his consignment might have been. For example, had he received silver based on the rates cited in Table 2, say in Jamaica in 1681, the exchange differential would have been 80% of face. But even this 20% discount would have been inadequate compensation if the silver were later assayed by Hull and found to be less than .740 fine for sterling money, or .745 fine for coins at the Spanish standard. Such a difference between the assayed value payable by the mint and the merchant's purchase price of the Potosí specie would have consumed any potential profit or advantage at having the money recoinage. In fact, the consignor could have had to pay out of pocket for the conversion of his weak Peruvian silver into Massachusetts coins. There were many reports of Potosí coins with lower than 75% silver content (see Table 1) and, aware of this possibility, I would expect that few New England Yankees would risk presenting doubtful silver to the mint. Unless an assayer had been available when the silver was obtained in the West Indies (which didn't happen), the possibility that one would end up with the short end of the deal was far too great to risk consignment of any unproven bullion to Hull. It would have been more profitable to buy extra sugar cane to be sold in Boston for molasses than it would have been to gamble with bringing home Potosi silver.<sup>73</sup>

To digress for a moment, how would a Boston merchant dispose of Potosí silver that was unprofitable to take to the mint? One way would be to pass it along quickly to the unsuspecting. Massachusetts traded with Virginia who desperately needed money, any money at all; it would be quite easy to unload some there, or perhaps on Maryland Catholics! New Yorkers, Newfoundland fishermen and Hartford settlers were also potential marks! Massachusetts silver was supposed to remain within the colony, but despite this technicality much was smuggled out. This export restriction meant Massachusetts residents purchasing goods imported by English or Irish traders docked in Boston had to pay with bills of exchange or Spanish-American silver, i.e. mostly Mexican; but it is possible some base Potosi cobs were imported specifically for later export (i.e. to be used to purchase imported goods from credulous outsiders).<sup>74</sup>

By 1652, the people in Massachusetts would have been acquainted with the Potosí scandal and, despite their own currency shortage, would have resisted base coinage entering their colony.

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<sup>72</sup> Jordan, *John Hull*, pp. 168-71.

<sup>73</sup> Louis Jordan, personal communication, April 22, 2008.

<sup>74</sup> Louis Jordan, personal communication, April 22, 2008.

Thus, another factor which may have encouraged the establishment of the mint was that the immediate availability of a reliable local currency would deter the importation and subsequent circulation of base Potosí silver in New England. As Jordan further describes, "...it seems possible the news of this scandal and the specter of debased coins may have acted as a catalyst prompting the Massachusetts legislature, now under the English Commonwealth government, to take action against the daily inconveniences of counterfeit and clipped coinage that are mentioned by Hull and others as the reason for instituting the coinage act of 1652."<sup>75</sup> If on the surface it would seem counterproductive for a government, during a severe hard money shortage, to discourage the circulation of any sort of silver coin, one must remember how in 1635 the Massachusetts General Court outlawed, for ethical reasons, the currency of lightweight English patent copper farthings leaving the colony only lead bullets and wampum within their small change medium.<sup>76</sup>

There is no mention of Potosí or Peruvian silver, debased or otherwise, in the documents establishing operational procedures at the mint, in early Massachusetts Bay records, or in Hull's personal mint journals available only for the 1670s; only Seville, pillar and Mexican varieties were identified.<sup>77</sup> However, if debased Potosí silver from the West Indies trade had ever been delivered to the mint by individual customers for assaying and rendering into Massachusetts coins in the period from 1652 to the 1670s prior to extant official records, we can never know unless new sources of documentation are discovered. Merchants within the private sector were well aware of the problem with Potosí money as exemplified by a 1688 entry by Jonathan Curwin of Salem who instructed his captain to accept payment for his shipment of fish in "either pillar, Seville or Mexican" pieces-of-eight.<sup>78</sup>

Some of this plate and money reprocessed at the mint came from Hull's own commercial ventures in the West Indies where he, as a very shrewd businessman, "more than any other person ... knew the condition of trade."<sup>79</sup> According to his surviving personal records from 1671 onward, all his shipments were sterling grade silver, so even he did not speculate in Potosí silver!<sup>80</sup> Very quickly a reciprocal relationship developed as a portion of the Spanish silver, now reassayed and reminted as Massachusetts currency, found its way back to the West Indies – illegality notwithstanding – where, in the Leeward Islands in 1670 and 1672, all the new "pine-tree coins" were regulated to pass at the same rate as in New England.<sup>81</sup>

With the exceptions previously noted for the Leeward Islands in 1670 and 1694, Jamaica in 1681, and Antigua in 1699, there is no other acknowledgment of Peruvian eight-*reales* in other West Indies locations. Crosby<sup>82</sup> reproduced a table showing the value of several foreign coins circulating in early Virginia which indicated that Spanish-American pieces-of-eight at 16 dwt,<sup>83</sup> excepting Peruvians, were to pass at five shillings, money of account. The Peru eight-*reales* and Dutch Lion Dollars were individually set 20% lower at four shillings, reflective of the Potosí

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<sup>75</sup> Jordan, *John Hull*, pp. 154-55.

<sup>76</sup> Felt, *Massachusetts Currency*, p. 20.

<sup>77</sup> Jordan, *John Hull*, p. 155.

<sup>78</sup> Weeden, *Economic and Social History of New England*, vol. 1, p. 384.

<sup>79</sup> Hermann Frederick Clarke, *John Hull, A Builder of the Bay Colony* (1940, repr. 1993) pp. 63, 103-9; Weeden, *Economic and Social History of New England*, vol. 1, pp. 159, 248.

<sup>80</sup> Louis Jordan, personal communication, April 22, 2008.

<sup>81</sup> Chalmers, *A History of Currency*, pp. 8-9, 64.

<sup>82</sup> Crosby, *Early Coins*, p. 23.

<sup>83</sup> The full weight eight-*reales* was 17½ dwt (420 grains); even though these coins were significantly clipped, they still passed at full value since hard money was in such short supply, especially in Virginia.

debasement and the fact that Lion Dollars were only 0.750 fine silver. (Remember this fineness was the about break-even point for consigning coin or bullion to Hull.) Crosby's chart first appeared in John Oldmixon's 1708 edition<sup>84</sup> although the dates when these values were effective was not stated, but, based on other collateral information, the time frame appears to have been within the 1655 to 1708 period.<sup>85</sup> What is clear is that throughout its early history, the currency of Virginia was tobacco, passing as commodity money; since the colony was severely strapped for hard money, Oldmixon's data suggest that any reasonable coin would have been acceptable – perhaps even base Potosí silver foisted on them by crafty New Englanders. Even though this double standard for Spanish-American silver could have been in place in Virginia just as it was in some West Indies locations, there is no evidence this practice ever extended to New England.

Although Spanish-American silver circulated widely in New England, there are no extant Potosí coins identified from this period; one can make the argument that all debased silver had been gathered up, melted, and recoined as Massachusetts silver and thus the mint destroyed the evidence. Among the 1013 Spanish-American coins recovered from the HMS *Feversham* recorded by John M. Kleeberg, there are no pre-debasement Potosí four-reales and only two eight-reales.<sup>86</sup> Considering how important circulating currency featured in the life of the early colonial tradesmen, it is most unlikely that the adverse effect of Potosí money in the marketplace would have been ignored by either merchants or legislators. Because of the known debasement, if Potosí silver were present in New England, businessmen would be aware of its deficiencies and thus object to it circulating at the same value as 0.93066 fine Mexican money or English sterling. There is no indication that any such dual standard for Spanish-American silver from different mints ever existed in New England, except later for a sliding scale based on reduced weights due to clipping. To have delivered deficient Potosí silver to the mint would have been unprofitable for the holder unless it had been procured at a substantial discount. The key factor here is how much a sea captain, merchant, importer, etc. paid for the Potosí silver in terms of other fully negotiable money of the day. Anyone holding debased coins would be more likely to pass them along to some monetarily unsophisticated client.

If any significant quantity of debased Potosí silver circulated in New England without its purchasing power reduced by some local regulation, such as in the double standard published from the West Indies and Virginia, it would have driven good Mexican silver into hiding, or the melting pot, in accordance with Gresham's law. If good Spanish-American silver were scarce, it is because of its limited supply and there is nothing to support the thesis that it was displaced from local commerce because of competition with debased Peruvians!<sup>87</sup> It is true that commodities functioned widely as money substitutes because the public preferred to reserve their scarce coins for imports or a rainy day.

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84 *The British Empire in America* (London, 1708) vol. 1, p. 316. Concerning this shortage, Oldmixon further elaborated (p. 315), "The Scarcity of Money is such in this Plantation, that Gentlemen can hardly get enough for Travelling [sic] Charges, or pay Labourers and Tradesmens Wages. It occasions also the commencing many vexatious Suits for Debt, which by this means are contracted."

85 This time frame is deduced from the year when eight-reales were rated at five shillings (see William W. Henning, *Statutes at Large ... Laws of Virginia from 1619* (New York, 1823) vol. 1 (March 1655/56) Act IV, p. 397) and 1708, when Oldmixon's first edition was published. See John J. McCusker, *Money and Exchange in Europe and America, 1660-1775, A Handbook* (Chapel Hill, 1978) pp. 205-6.

86 *Numismatic Finds of the America: An Inventory of American Coin Hoards (Treasure Trove), Shipwrecks, Single Finds, and Finds in Excavations* (New York, unpublished manuscript, 2007, forthcoming), pp. 75-77. Of the 1013 silver coins inventoried, 762 were identifiable. Of these, 470 were from Potosí but from the period of the scandal, there were 16 one-real pieces and six two-reales in addition to the two pieces-of-eight already mentioned.

87 "Cheap money drives out dear, if they exchange for the same price." Reference is invited to a review of inaccurate renditions of Gresham's Law presented by the 1999 Nobel laureate in economics, Robert A. Mundell, "Uses and Abuses of Gresham's Law in the History of Money," *Zagreb Journal of Economics*, Vol. 2, No. 2, 1998; <http://www.columbia.edu/~ram15/grash.html> accessed Feb 9, 2008.

## In Conclusion

As initially expressed in the introduction, this paper explores the possible influence of the debasement of a sizable portion of the world's currency standard on the creation and operation of the Massachusetts Bay Mint during the second half of the seventeenth-century. In 1992, I concluded that "it would be a safe speculation that some of the questionable money [consigned to the Boston Mint] was from the Potosí scandal of 1648."<sup>88</sup> Although this idea seems very logical on the surface, on closer examination it must be modified for at least two reasons.

First of all, other English-speaking colonies in the British West Indies and Virginia, where Spanish-American silver circulated, officially discounted Potosí Mint silver by generally 20%. If this concession had not been made and all coins, regardless of intrinsic quality, passed at the same rate, the inferior or questionable money would have soon displaced the good from circulation as predictable by Gresham's Law, a situation that occurred in Guatemala where the weakness of the Peruvian silver was ignored. Considering that the Puritan leaders were very mindful of financial matters, one would have certainly expected some differential between the strong and weak coinages to have been imposed if this debased money were present in New England to any significant degree. No dual exchange rate was ever published, or even discussed, relative to the circulation of dependable versus unreliable Spanish currencies. This is good evidence that significant debased Potosí silver did not circulate to any extent in New England.

Secondly, the Massachusetts Mint was established with its primary function to assay and recoin "bullion, plate and Spanish coins" into a consistent, trustworthy sterling currency of guaranteed quality. This mission of the mint was not to purge uncertain money from circulation but rather to receive bulk consignments of silver deposited by merchants and business people who stood to profit from the difference between the mint price paid for the bullion and monetary value of the coined money, less any professional fees. Hull and his associate could remove the guesswork about the purity of any silver, Spanish-American or otherwise, consigned to it. We have previously examined the numbers and found that unless the unexamined or questionable silver were procured by the consignor at a substantial discount – even greater than the allowable 16.7 to 28.6% – he would gain very little or perhaps lose in the transaction. It is doubtful the Bostonian merchant in the West Indies would even accept Peruvians in the first place with the intent of delivering the specie to Hull. So basically the seigniorage schedule under which Hull operated would have discouraged any but sterling grade silver unless it had been prudently obtained. Since there is nothing in the extant records about the purchases of weak silver, we must assume that it was not a major raw material for the mint.

However, there is a reason why the debased Potosí money may have encouraged the establishment of a mint in far-off New England. If the colony was able to provide a dependable local coinage, the presence of good money would have impeded any significant importation and circulation of undesirable Potosí money into the region. No one would have accepted questionable money if good silver was at hand. Since the two currencies were of *unequal* market value, the better one (the Massachusetts silver) would not have been displaced. If this last premise is true, this would have created in Boston an inverse relationship between the establishment of an operating mint and the active currency of debased Peruvian money – the good mint kept the Peruvians out.

My earlier hypothesis needs revision since this current paper amends my prior assumption that a significant quantity of Potosí silver participated in Hull's mint. The Potosí silver could have been

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88 Mossman, *Money*, p. 79.

an important player but to date no contemporaneous supporting historical evidence has come forward. However, as with any other historical theory, should new facts be revealed, the role of debased Potosí money in the Massachusetts Mint is subject to modification. **CNL**

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